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ABSTRACT

This foods and nutrition curriculum guide is designed for eleventh and twelfth grade consumer and homemaking students who have had two years of previous vocational home economics. The guide contains four sections and eight instructional units. Section 1, Food-Related Careers, contains one instructional unit on employment in food-related occupations. Section 2, Nutrition, is comprised of one unit on food and good health. The third section, Consumer Food Management, contains four units that focus on food planning, food purchasing, food preparation, and social and entertainment skills. In the final section of the guide, Food Preservation, two units of instruction focus on canning, freezing, and drying. Each instructional unit follows a typical format that includes eight basic components: performance objectives, suggested activities for teacher, information sheets, assignment sheets, job sheets, transparency masters, tests, and answers to tests and assignment sheets. In addition, some units contain transparency masters and job sheets. (LRA)

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Foods and Nutrition

In-Depth Curriculum

Written by
Debbie Truitt, Curriculum Specialist
State Department of Vocational and Technical Education
Stillwater, Oklahoma
1980

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Developed by the Curriculum and Instructional Materials Center
For the Division of Vocational Home Economics
Joyce Thompson, State Supervisor
OKLAHOMA STATE BOARD OF VOCATIONAL AND TECHNICAL EDUCATION
Leslie Fisher, Chairman
Francis T. Tuttle, Director
Bob Patton, Coordinator, Curriculum and Instructional Materials Center

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FOODS AND NUTRITION
In-Depth Curriculum

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FOREWORD

We believe the most effective way to improve vocational education is through the development and utilization of a good, sound instructional materials delivery system. We feel that *Foods and Nutrition: In-Depth* will expedite program uniformity, set minimum program standards, and provide a means for a higher level of student and teacher accountability in this state.

Foods and Nutrition: In-Depth is designed for 11th or 12th grade consumer and homemaking students who have had two years of previous vocational home economics. The contents of *Foods and Nutrition: In-Depth* build upon foundations set in the Foods and Nutrition sections of *Home Economics I: Basic Core* curriculum and *Home Economics II: Basic Core* curriculum. This in-depth study is designed to increase basic knowledge and develop skills in nutrition, consumer food planning, purchasing, preparation, and food preservation. Attention is also focused on employment in food-related occupations and developing social and entertainment skills.

It is believed this resource will afford each home economics teacher an opportunity to provide a stronger program. As teachers implement these materials in the classroom, the students will be better prepared to assume roles in the occupation of homemaking. It is our belief that the total vocational home economics program will benefit through the use of *Foods and Nutrition: In-Depth*.

Francis T. Tuttle, State Director
State Department of Vocational and
Technical Education

Joyce Thompson, State Supervisor
Home Economics Education

PREFACE

Why *Foods and Nutrition: In-Depth*? Inflating prices at the marketplace . . . shifting work patterns . . . changing lifestyles . . . availability of new food forms . . . increasing employment opportunities in food-related occupations . . . energy shortages . . . and a nation publicized as having overfed, undernourished people. What better reasons for developing and teaching *Foods and Nutrition: In-Depth*!

The basic purpose of *Foods and Nutrition: In-Depth* is to provide content and "hands-on" experiences for students. *Foods and Nutrition: In-Depth* is intended to serve as a basic core from which teachers can motivate, localize and personalize to teach a one-semester course to eleventh or twelfth grade students. Content of *Foods and Nutrition: In-Depth* builds upon foundations in *Home Economics I: Basic Core* and *Home Economics II: Basic Core*.

Foods and Nutrition: In-Depth was developed and reviewed by a committee of dedicated people. It is the goal of this committee that *Foods and Nutrition: In-Depth* will enable students to further accept their roles as consumers and homemakers.

Foods and Nutrition: In-Depth represents a stockpile of information and experiences. As new and experienced teachers launch each year's group of students upon their educational adventure, it is hoped that each will remember:

A Bag of Tools

Isn't it strange
That princes and kings,
And clowns that caper
In sawdust rings,
And common people
Like you and me
Are builders for eternity?

Each is given a bag of tools,
A shapeless mass,
A book of rules;
And each must make,
Ere life is flown,
A stumbling block
Or a steppingstone.

--R.L. Sharpe

Debbie Truitt, Home Economics
Curriculum Specialist

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VOCATIONAL HOME ECONOMICS TEACHERS

Cheryl Bower	Lone Grove High School
Freda Duncan	Tishomingo High School
Jessie Erwin	Moore High School
Anna Lou Harris	Watonga High School
Pat Kellner	Okeene High School
Esther Moorhead	Berryhill High School, Tulsa
Nancy Nelson	Garber High School
Virginia Sasser	Perkins-Tryon High School
Pam Sparks	Tuttle High School
Betty Wilkerson	Jones High School

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INDUSTRY REPRESENTATIVES

Gloria Kamphus
Oklahoma Dairy Council

Kathy Yadrick, Nutrition Specialist
Oklahoma State University

STATE DEPARTMENT OF VOCATIONAL HOME ECONOMICS EDUCATION STAFF

Joyce Thompson, State Supervisor

Helen Gay Armstrong, West District
Edna Crow, Southwest District
Edna Ruth Mahaffey, North District
Betty True, Northeast District
Cynthia Ward, East District
Mary Jo Drummond, Southeast District

TEACHER EDUCATION STAFF

Donna Beard, Oklahoma University
Helen Brown, Southwestern State University
Dr. Lora Cacy, Oklahoma State University
Dr. Irene Clements, University of Science and Arts
Dr. Willa Combs, Langston University
Virginia Dick, Southwestern State University
Dr. Bettye Gaffney, Oklahoma State University
Dr. Grace Githens, Cameron University
Dr. Elaine Jorgenson, Oklahoma State University
Lenorah Polk, Central State University
Wanda Wilson, Central State University

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Phyllis J. Sneed, R.D.
Nutrition Specialist
Oklahoma State University
Stillwater, Oklahoma

Dr. Bernice Kopel, Associate Professor
FNIA
Oklahoma State University
Stillwater, Oklahoma

Jamee Sloan, Health Curriculum Specialist
Oklahoma State Department of
Vocational and Technical Education
Stillwater, Oklahoma

Daniel Emenheiser, Assistant Professor
Hotel & Restaurant Administration
Oklahoma State University
Stillwater, Oklahoma

Red Hilyard
Red's Country Cured Meats
Stillwater, Oklahoma

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Dana Cole, Media Specialist
Teddi Cox, Assistant Word Processing Supervisor
Bill Dunn, Illustrator
Jenny Fowler, Word Processing Supervisor
Debbie Griffith, Secretary
Kim Hale, Illustrator
Susan Hedrick, Librarian
Nancy Hilley, Illustrator
Carol Hiner, Duplicating Operator
Sharon Humphrey, Assistant Librarian
Kent Jones, Business Manager
Robin Ketch, Typist
Gloria Koch, Phototypesetter
Cindy Kruithof, Assistant Librarian
Carol Laughlin, Librarian
Gari Sha Leisher, Typist
Sandra Lewis, Film Librarian
Edith Mekis, Illustrator
Alice Mulder, Typist

Rose Primeaux, Typist
Janet Raines, Secretary
Robert Randall, Illustrator
Beth Renwick, Typist
Wendy Rodebaugh, Curriculum Typist
Julie Rogers, Secretary
Jane Smola, Graphics Secretary
Terry Stanley, Typist
Vance Story, Art Department Manager
Lin Thurston, Illustrator
Robin Wells, Secretary
Carrie Williams, Illustrator

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USE OF THIS PUBLICATION

Instructional Units

Foods and Nutrition: In-Depth includes four sections and eight instructional units. A standard format was established in 1970 for development of instructional materials for all Oklahoma vocational teachers. This format includes eight basic components which form a unit of instruction: performance objectives, suggested activities for teacher, information sheets, assignment sheets, job sheets, transparency masters, tests, and answers to tests and assignment sheets. Depending on the specific objectives, transparency masters, assignment sheets, and job sheets may or may not be included in the unit of instruction.

All of the unit components "zero in" toward measurable and observable learning outcomes. Teachers are encouraged to supplement, personalize, localize, and motivate with these materials in order to develop a complete teaching-learning process.

Units of instruction are designed for use in more than one lesson or class period of instruction. Careful study of each unit of instruction by the teacher will help him or her determine:

A. Amount of material that can be covered in each class period
B. Skills which must be demonstrated
    1. Supplies and equipment needed
    2. Amount of practice needed
    3. Amount of class time needed for demonstrations
C. Supplementary materials, such as pamphlets and filmstrips, that must be ordered
D. Resource people who must be contacted

Performance Objectives (white pages)

Each unit of instruction is based on the performance needed for successful employment in an occupational area. Performance objectives are stated in two forms: unit objectives, stating the subject matter to be covered in a unit of instruction, and specific objectives, stating the student performance necessary to reach the unit objective.

Since the objectives of the unit provide direction for the teaching-learning process, it is important that the teacher and students have a common understanding of the intent of the objectives. Following is a list of performance terms, their meanings, and behavioral synonyms which may have been used in this material.

A. Name--The individual supplies a name for objects, events, or people

Behavioral synonyms: Label, list, letter, record, reiterate, repeat, write

B. Identify--The individual selects a named, described, or pictured object by pointing to it, touching it, picking it up, or selecting it

Behavioral synonyms: Select, mark, match, choose, judge

C. State a rule--The individual communicates a relationship or principle which could be used to solve problems or perform a task

D. Apply a rule--The individual supplies an answer to a problem by using a stated relationship or principle

Behavioral synonyms: Solve, calculate

E. Describe--The individual relates sufficient characteristics or properties of an object or event so that a second individual will be able to state what is being discussed

Behavioral synonyms: Define, discuss, interpret, recite, tell how, tell what happens when

F. Distinguish--The individual selects an object or event from two or more which are easily confused

Behavioral synonyms: Discriminate, differentiate

G. Order--The individual arranges three or more objects or events in a sequence based on a stated property

Behavioral synonyms: Arrange, sequence, list in order, classify, divide, isolate, sort

H. Construct--The individual makes a physical object, a verbal statement, or a drawing

(NOTE: Construct is used when the finished product or result is important.)

Behavioral synonyms: Draw, make, build, design, formulate, reproduce, transcribe, convert, put together, compile

I. Demonstrate--The individual performs several operations necessary to carry out a specified process

(NOTE: Demonstrate is used when it is desirable to watch the student perform a task, one of the highest levels of student performance.)

Behavioral synonyms: Show your work, show procedure, perform an experiment, perform the steps, operate, remove, replace, turn off/on, (dis) assemble, (dis) connect

The objectives should be provided for students and stressed throughout the teaching-learning process. This will help answer any questions concerning performance requirements for each instructional unit. The objectives can also help determine teaching strategies and instructional methods. Prepare for each unit by deciding how each objective can best be taught.

The objective sheet may be also used as a quick pretest to determine prior knowledge of students and if further study or activities are necessary. Teachers should feel free to modify, delete, or add objectives in order to meet the needs of the students and community. When changes in objectives are made, the teacher should remember to supply the needed information, assignment and/or job sheets, and criterion test items

Suggested Activities (pink pages)

This component is included only in teacher material. The suggested activities page assists teachers during the preparation stage of the teaching-learning process by providing suggestions for delivery and/or presentation during the instructional process. Read the suggested activities before teaching the units so supplemental materials can be obtained, audiovisual materials prepared, and outside rosources contacted. Duties of the teacher will vary according to the particular unit.

The references that are listed are ones used in the development of each unit. They should be used by the teacher to supplement her or his knowledge of the subject area or to help students with particular interest or occupational objective in the area covered.

Information Sheet (green pages)

The information sheet provides "must know" content essential for meeting the cognitive (knowledge level) objectives of the unit. The information is written in a topical outline form and is keyed to the specific objectives.

Teachers will find that the information sheet serves as an excellent guide for presenting background knowledge necessary to develop the skills specified in the unit objective. The information sheet may also be used for coordination activities and advisory committees.

Students should read the information sheet before the information is discussed in class. Space is provided in margins for students and teachers to add notes that supplement, localize, personalize, and provide motivation for each unit.

Transparency Masters (white pages in teacher material and green in student material)

Transparency masters provide information in a special way. The students may see as well as hear the material being presented, thus reinforcing the learning process. Transparencies may present new information or they may reinforce information presented in the information sheet. They are particularly effective when identification is necessary.

Transparencies should be made and placed in the notebook where they will be immediately available for use. Transparencies direct the class's attention to the topic of discussion. It is recommended that teachers stand away from the overhead projector when discussing transparency material to avoid speaking too loudly.

Assignment Sheets (brown pages)

Assignment sheets give students a chance at problem solving, self-assessment, and/or practical experience with the information. They assist students in the application of knowledges which are necessary prerequisites to skill development. These may be given to the student for completion in class or used for homework assignments. Answer sheets are provided when appropriate and can be used by the student and/or teacher for checking student progress.

Job Sheets (blue pages)

Job sheets are another important segment of a unit of instruction. The job sheets provide a list of equipment, tools, and materials needed to complete a manipulative or psychomotor skill. They describe a step-by-step procedure needed to complete each task or job. Diagrams, photographs, and illustrations are provided to assist students in achieving the skill.

A teacher should demonstrate to students the procedures outlined in each job sheet. Furthermore, the teacher needs to localize the job sheet accordingly to the equipment and supplies available in the local lab or shop situation. Job sheets also furnish potential employers with a picture of the skills being taught and the performances they might reasonably expect from a person who has had this vocational instruction.

Tests (yellow pages)

This component provides criterion-referenced evaluation of every objective listed in the unit of instruction. It is crucial to note that both paper-pencil and performance objectives must be evaluated.

The tests may be written or oral. It is recommended that the tests be divided into shorter tests covering three or four objectives at a time and given soon after those objectives have been covered. A selection of questions from the units covered may be used for final tests at the end of each term if desired. If objectives have been added, deleted, or modified, be sure to make the changes on the test.

The acceptable response on a unit test, eighty-five percent in most units, may be raised or lowered to fit the topic or students' ability levels. The percentage applies to the overall score, not to each individual question. The final unit grade should be obtained by using the "paper-pencil" score along with teacher evaluations of student demonstrations of the desired skills.

Answers to Test and Assignment Sheets (pink pages)

These components are designed to assist the teacher in evaluation of student performances.

Page Numbering

Each publication from the Curriculum and Instructional Materials Center is assigned a specific abbreviation. For example, *Foods and Nutrition: In-Depth* has been abbreviated FN. The units are then numbered consecutively within each section. An example of a page number is FN - 1-A. Since CIMC publications are loose leaf, this system of page numbering was adopted so pages from different manuals would not get mixed up.

Methods of Disseminating Material

Material may be given out a unit or page at a time to keep the material before the students always new. Some teachers ask students to furnish a three-ring binder for the units while studying a particular unit. This is more convenient for taking the material home to study. Each unit is then placed in the larger binders upon its completion. The large binders may be purchased at cost from the CIMC. Some teachers have stored the materials by units in filing cabinets or boxes until needed for use. All the units may be given out at once if desired.

Student materials should be provided for each student for best results. They may be purchased in-state for less than a teacher can reproduce the materials, especially when the teacher's time is considered. Student materials contain everything but the test answers, answers to assignment sheets, and suggested activities. The tests are collated all together at the back of student material and should be removed and stored until needed. The students should be allowed to take their materials home at the end of the year.

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Teaching Methods

It is a challenge to keep students motivated. Supplement the objectives by providing the "why," personal experiences, and current information. Prepare for each unit by deciding how each objective can best be taught. Allow students to become involved in preparing and planning.

EMPLOYMENT IN FOOD-RELATED OCCUPATIONS
UNIT I

UNIT OBJECTIVE

After completion of this unit, the student should be able to locate opportunities for employment, and evaluate a food-related occupation. This knowledge will be evidenced by completion of the assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with food-related occupations to correct definitions.
2. Match employment opportunities in apprentice/unskilled occupations to the correct descriptions.
3. Match employment opportunities in skilled occupations to the correct descriptions.
4. Match employment opportunities in professional and managerial occupations to the correct descriptions.
5. Distinguish between advantages and disadvantages of employment in food-related occupations.
6. Name types of training available for food-related occupations.
7. Name factors affecting job advancement.
8. Select from a list personal qualities needed for successful employment.
9. Determine personal qualities and training or education required for food-related occupations.
10. Locate related employment opportunities.
11. Evaluate a food-related occupation.

EMPLOYMENT IN FOOD-RELATED OCCUPATIONS
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide students with objective sheet.

   B. Provide students with information and assignment sheets.

   C. Discuss unit and specific objectives.

   D. Discuss information and assignment sheets.

   E. Develop appropriate learning activities for special needs students.

   - Examples: Slide-tapes, alternative evaluation

   F. Plan Concentration game using occupational titles and descriptions.

   G. Supplement unit with filmstrip and cassettes, "Careers in the Food Industry," available from Butterick Publishing, Div. American Can Co., 161 Sixth Ave., New York, New York 10013.

   H. Make arrangements or collect information for a career corner to assist students in completion of Assignment Sheet #1.

   I. Invite food service owner or manager to class to discuss employment opportunities, personal qualities needed, and benefits of food service industry employment.

   J. Arrange for panel of persons employed in food-related occupations to discuss their jobs as well as advantages and disadvantages of such employment to assist students in completion of Assignment Sheet #3.

   K. Allow students to complete Assignment Sheet #2 as part of a foods home experience.

   L. Assist students in arranging for interviews or shadowing projects necessary to complete Assignment Sheet #3.

   M. Arrange a tour of food-related business or industrial facilities available in the area.

   N. Give test.

   O. Reteach if necessary.

II. Instructional materials:

   A. Objective sheet

   B. Information sheet

C. Assignment sheets

   1. Assignment Sheet #1--Determine Personal Qualities and Training or Education Required for Food-Related Occupations

   2. Assignment Sheet #2--Locate Related Employment Opportunities

   3. Assignment Sheet #3--Evaluate a Food-Related Occupation

D. Test

E. Answers to test

III. Unit references:

A. Anderson, Henry W. *The Modern Food Service Industry.* Dubuque, Iowa: William C. Brown Company, 1976.

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N. *Dictionary of Occupational Titles (DOT).* 4th ed. Washington, D.C.: Superintendent of Documents/U.S. Government Printing Office, 1977.

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EMPLOYMENT IN FOOD-RELATED OCCUPATIONS
UNIT I

INFORMATION SHEET

I. Terms and definitions

A. Apprentice/unskilled--Occupations available with beginning level of responsibility and pay; essential skills or training obtained on the job

B. Skilled--Occupations available with increased responsibility and pay; technical skills obtained through experience or advanced training

C. Professional and managerial--Occupations available usually at the highest level of responsibility and pay; special knowledge obtained through education, experience, or other advanced training

D. Food service--Business or industry responsible for serving food to individuals or groups

E. Commercial food service--Food service operation open to public; operates to make profit

F. Institutional food service--Food service operation in which the main function is to provide food for patients, students, or employees

II. Employment opportunities in apprentice/unskilled occupations

(NOTE: Food-related occupations employ more than 30 percent of the work force. More than 23 million people are involved in producing, processing, and distributing food, with millions of others employed in research, education, and journalism. The following occupations represent only a sample of food-related occupations. These job descriptions will vary according to needs and labor supply.)

A. Apprentice baker--Keeps bakery supplies and equipment stocked; assists in mixing, preparing pans, and baking products; cleans bakery utensils, pans, equipment, and work area

B. Beverage person--Brews and serves coffee, tea, and other beverages; cleans brewing and serving equipment; prepares and issues beverages to be served by waiters/waitresses

C. Counter attendant--Serves food from counters and steam tables and keeps them cleaned and polished; keeps serving line supplied; issues checks for service and accepts payments

D. Dining room attendant--Clears tables, carries dirty dishes to kitchen, and resets tables

E. Kitchen helper--Maintains kitchen work area and equipment, keeping them in clean and orderly condition; transfers supplies between storage and work areas

INFORMATION SHEET

F. Dishwasher--Washes dishes either manually or by operating special dishwashing equipment; performs minor adjustments to keep dishwashing equipment working properly

G. Waiter/waitress--Takes customers' orders, serves food and beverages, makes out checks, and sometimes takes payments

H. Dining host/hostess--Supervises and coordinates activities to ensure fast and courteous service to patrons

I. Produce packer--Packs produce in boxes, barrels, baskets, or crates for storage or shipment

J. Product helper--Feeds ingredients to industrial machine, transports and packs finished products, and assists as needed in the food processing and packaging plant

K. Grocery shelver--Unpacks cartons and crates of merchandise, checks items against invoices, and prices and places items on shelves

L. Supermarket cashier--Operates cash register and records costs of items being purchased, takes money, makes change, and often sacks items

M. School lunch assistant--Assists in preparation and serving of food and cleanup of facilities in school cafeteria

N. Apprentice cook--Performs duties of cook under direct supervision as learning takes place during on-the-job training

O. Fountain server--Prepares and serves soft drinks and ice-cream dishes using memorized formulas and methods or following specific directions

P. Feedlot pen rider--Observes cattle for defects while in feedlot; weighs and loads cattle for shipping at end of feeding program

Q. Farm/ranch hand--Engages in planning, cultivating, and harvesting crops and raising livestock

R. Dietetic aide--Assists dietitian in menu planning and taking inventory; also assists in filling out purchase orders and setting up meal trays

III. Employment opportunities in skilled occupations

A. Bartender--Mixes and sometimes serves drinks to customers, collects money, orders supplies, and arranges display in bar

B. Food service cashier--Receives money from customers and makes change; may balance register and prepare bank deposit

C. Cook--Cooks and seasons food; may estimate and order food supplies and equipment, plan menus, and supervise and coordinate workers

INFORMATION SHEET

D. Butcher--Cuts meat into different forms for purchase by consumer

E. Baker--Prepares breads, cakes, cookies, and pastries for purchase by consumer

F. Chef--Supervises, coordinates, and participates in activities of cooks and other kitchen personnel

G. Supermarket manager--Responsible for inventory, training and actions of employees, customer relations, advertising, bookkeeping, and banking procedures to ensure profit

H. Food demonstrator--Demonstrates and informs interested people about particular foods to promote sales

I. Appliance demonstrator--Demonstrates and informs interested people about appliances in order to promote sales and correct usage

J. Food retailer--Sells small quantities of food to customers

K. Food wholesaler--Sells large quantities of food at reduced prices to customers for resale

L. Food package designer--Studies and designs food containers

Examples: Boxes, bags, plastic tubs

M. Food processor--Coordinates canning, freezing, preserving, or packing of food products

N. Food photographer--Takes photographs of food to be included in magazines, newspapers, billboards, or other media

O. Food inspector--Responsible for inspecting foods and processing facilities to maintain quality and sanitation of products

P. Nutrition technician--Plans menus and discusses nutritional needs of patients or individuals

Q. Teaching aide--Assists foods teacher in setting up laboratory experiments and in other areas as needed

R. Market researcher--Conducts surveys and uses other methods to determine consumer preferences for goods and services

S. Research assistant--Assists supervisor according to type of research being conducted

T. Caterer--Provides food and services for special functions

U. Appliance designer--Designs appliances while considering consumer needs and desires

INFORMATION SHEET

V. Truck gardener--Raises, processes, transports, and sells large quantities of fruits and vegetables

W. Farmer--Manages land used for production of plants and animals

X. Commercial fisher--Catches or gathers large quantities of fish for sale or processing

IV. Employment opportunities in professional and managerial occupations

A. Food service manager/owner--Responsible for entire food service operation including personnel, purchasing, food preparation and serving, advertising, customer relations, bookkeeping, and banking procedures to ensure profit

B. Market analyst--Studies, analyzes, and evaluates market trends and cycles as related to supply and demand of goods and services

C. Test kitchen manager--Manages test kitchen procedures and coordinates employees who devise and test recipes using company's products

D. Product designer--Works to improve existing products and develop new products for consumer use

E. Quality-control technologist--Inspects raw materials and finished products, making adjustments to improve product quality

F. Public service representative--Assists interested persons concerning energy awareness, appliances, and kitchen planning

G. Nutrition columnist--Writes food and nutrition articles for newspapers, magazines, and other media

H. Farm/ranch manager--Operates farm or ranch for purpose of securing maximum continuous profit by using organizational and managerial skills

I. Extension home economist--Provides leadership in planning, developing, conducting, and evaluating educational programs in all areas of family living

J. Professor of nutrition--Teaches food and nutrition subjects to college students; often involved in conducting research

K. Home economics teacher--Teaches students variety of subjects including clothing and textiles, food and nutrition, housing and home furnishings, personal and family relationships, child development, home management, and consumer education

L. Dietitian--Plans menus and diets, which will provide required food and nutrients for others

INFORMATION SHEET

M. Food chemist--Tests food for safety and wholesomeness

N. Grain elevator superintendent--Supervises and coordinates activities of workers engaged in unloading, loading, storing, cleaning, and blending grain for milling and shipment

O. Research scientist--Experiments to find solutions to problems involving food and nutrition

P. Nutritionist--Studies processes by which the body uses food to build and maintain healthy tissues

Q. Soil scientist--Studies soil characteristics to determine uses of soils for maximum productivity

V. Advantages and disadvantages of employment in food-related occupations

A. Advantages

1. Jobs may lead to lifelong careers
2. Jobs are available in any location
3. Advancement opportunities are available
4. Part-time jobs are usually available, allowing flexible working hours
5. Fringe benefits are available

B. Disadvantages

1. Working on shifts, weekends, and holidays may be required
2. Hard physical labor may be involved
3. Working under pressure occurs at times

Examples: Trying to serve many customers in short amount of time, getting the harvest in, meeting manufacturing deadlines

VI. Types of training available for food-related occupations

A. Vocational

Examples: High school, area vocational-technical school, technical institute

B. Private

Examples: Technical institute, trade school

INFORMATION SHEET

C. College and university

Examples: Four-year program, two-year program, graduate program

VII. Factors affecting job advancement

A. Ability to get along and work well with others

B. Determination to succeed

C. Length of service

D. On-the-job training

E. Recommendation from another employer

F. Additional education

G. Successful job performance

VIII. Personal qualities needed for successful employment

A. Reliability

B. Desire to work with people

C. Good physical health

D. Ability to work under pressure

E. Good health habits

F. Patience

G. Ability to follow instructions

H. Dependability and loyalty

i. Pleasant personality

J. Clean and neat appearance

K. Desire to serve people

L. Ability to handle criticism

M. Stamina

EMPLOYMENT IN FOOD-RELATED OCCUPATIONS
UNIT I

ASSIGNMENT SHEET #1–DETERMINE PERSONAL QUALITIES AND TRAINING OR EDUCATION REQUIRED FOR FOOD-RELATED OCCUPATIONS

NAME ______________________________ SCORE __________

Getting a job that is right for your personality, training, and education is a challenge. Use resources such as actual personal interviews, the *Dictionary of Occupational Titles*, textbooks, and newspapers to determine personal qualities and training or education required for the following food-related occupations, and two more food-related occupations of your choice. Use this information as you consider this type of employment.

Occupation	Personal Qualities	Training or Education
Restaurant owner		
Food retailer		
Farmer		

ASSIGNMENT SHEET #1

Occupation	Personal Qualities	Training or Education
Home economics teacher		
Extension home economist		
Cook		
Waiter/waitress		

ASSIGNMENT SHEET #1

Occupation	Personal Qualities	Training or Education
Dietitian		
Other		
Other		

EMPLOYMENT IN FOOD-RELATED OCCUPATIONS
UNIT I

ASSIGNMENT SHEET #2--LOCATE RELATED EMPLOYMENT OPPORTUNITIES

NAME ______________________________ SCORE ____________

Food-related occupations provide employment opportunities for people with almost any educational background, interest, or skill.

Survey your area and list ten food-related businesses or industries that serve as possible employment sources. Also, list opportunities that exist at each business or industry.

Examples: Restaurant, cafeteria, hospital, school, senior citizen center, meat packing plant, bread manufacturing plant, dairy, grocery store, bakery, grain elevator

Name of Business or Industry	Employment Opportunities
1.	
2.	
3.	
4.	

ASSIGNMENT SHEET #2

Name of Business or Industry	Employment Opportunities
5.	
6.	
7.	
8.	
9.	
10.	

EMPLOYMENT IN FOOD-RELATED OCCUPATIONS
UNIT I

ASSIGNMENT SHEET #3--EVALUATE A FOOD-RELATED OCCUPATION

NAME ______________________________ SCORE ____________

Select a food-related occupation that interests you. Either arrange for an interview with a person who is employed in that job, or spend the day "shadowing" this person to obtain answers to the following questions. "Shadowing" is a method of training or learning whereby one person follows another around to observe job responsibilities and procedures.

1. What is your job title? ______________________________
2. What are your job responsibilities? ______________________________
3. What training is necessary? ______________________________
4. What personal qualifications are necessary? ______________________________
5. What education is necessary? ______________________________
6. What are the advantages and disadvantages of this occupation? ______________________________

ASSIGNMENT SHEET #3

7. Describe the working conditions that exist in this occupation.

8. What job opportunities are there in this city and the surrounding area for this job?

9. What is the approximate starting salary and benefits? What salary increases can be expected?

10. What advice would you give a person considering this career?

Based on the information obtained, would you still consider this occupation as a future career?

Explain your answer.

EMPLOYMENT IN FOOD-RELATED OCCUPATIONS
UNIT I

TEST

NAME ____ SCORE ____________

1. Match terms associated with food-related occupations to the correct definitions. Place the correct numbers in the blanks provided.

_____a. Food service operation in which the main function is to provide food for patients, students, or employees

_____b. Occupations available with increased responsibility and pay; technical skills obtained through experience or advanced training

_____c. Business or industry responsible for serving food to individuals or groups

_____d. Food service operation open to public; operates to make profit

_____e. Occupations available usually at the highest level of responsibility and pay; special knowledge obtained through education, experience, or other advanced training

_____f. Occupations available with beginning level of responsibility and pay; essential skills or training obtained on the job

1. Apprentice/unskilled
2. Skilled
3. Professional and managerial
4. Food service
5. Commercial food service
6. Institutional food service

2. Match employment opportunities in apprentice/unskilled occupations to the correct descriptions. Place the correct numbers in the blanks provided.

_____a. Washes dishes either manually or by operating special dishwashing equipment; performs minor adjustments to keep dishwashing equipment working properly

_____b. Supervises and coordinates activities to ensure fast and courteous service to patrons

_____c. Serves food from counters and steam tables and keeps them cleaned and polished; keeps serving line supplied; issues checks for service and accepts payments

1. Dining host/hostess
2. Dishwasher
3. Counter attendant

_____d. Clears tables, carries dirty dishes to kitchen, and resets tables

_____e. Packs produce in boxes, barrels, baskets, or crates for storage or shipment

_____f. Observes cattle for defects while in feedlot; weighs and loads cattle for shipping at end of feeding program

_____g. Assists in preparation and serving of food and clean-up of facilities in school cafeteria

_____h. Takes customers' orders, serves food and beverages, makes out checks, and sometimes takes payments

_____i. Engages in planning, cultivating, and harvesting crops and raising livestock

_____j. Performs duties of cook under direct supervision as learning takes place during on-the-job training

_____k. Keeps bakery supplies and equipment stocked; assists in mixing, preparing pans, and baking of products; cleans bakery utensils, pans, equipment, and work area

_____l. Operates cash register and records costs of items being purchased, takes money, makes change, and often sacks items

_____m. Unpacks cartons and crates of merchandise, checks items against invoices, and prices and places items on shelves

_____n. Prepares and serves soft drinks and ice-cream dishes using memorized formulas and methods or following specific directions

_____o. Maintains kitchen work area and equipment, keeping them in clean and orderly condition; transfers supplies between storage and work areas

_____p. Brews and serves coffee, tea, and other beverages; cleans brewing and serving equipment; prepares and issues iced beverages to be served by waiters/waitresses

4. Dining room attendant
5. Farm/ranch hand
6. Apprentice baker
7. Waiter/waitress
8. Feedlot pen rider
9. Produce packer
10. Apprentice cook
11. Grocery shelver
12. Supermarket cashier
13. School lunch assistant
14. Beverage person
15. Fountain server
16. Kitchen helper
17. Product helper
18. Dietetic aide

_____q. Assists dietitian in menu planning and taking inventory; also assists in filling out purchase orders and setting up meal trays

_____r. Feeds ingredients to industrial machine, transports and packs finished products, and assists as needed in the food processing and packaging plant

3. Match employment opportunities in skilled occupations to the correct descriptions. Place the correct numbers in the blanks provided.

_____a. Supervises, coordinates, and participates in activities of cooks and other kitchen personnel

_____b. Manages land used for production of plants and animals

_____c. Provides food and services for special functions

_____d. Sells small quantities of food to customers

_____e. Responsible for inspecting foods and processing facilities to maintain quality and sanitation of products

_____f. Raises, processes, transports, and sells large quantities of fruits and vegetables

_____g. Demonstrates and informs interested people about appliances in order to promote sales and correct usage

_____h. Cuts meat into different forms for purchase by consumer

_____i. Mixes and sometimes serves drinks to customers, collects money, orders supplies, and arranges display in bar

_____j. Plans menus and discusses nutritional needs of patients or individuals

_____k. Assists supervisor according to type of research being conducted

_____l. Coordinates canning, freezing, preserving, or packing of food products

_____m. Studies and designs food containers

1. Truck gardener
2. Appliance demonstrator
3. Butcher
4. Farmer
5. Food retailer
6. Chef
7. Caterer
8. Food inspector
9. Nutrition technician
10. Bartender
11. Food processor
12. Food package designer
13. Research assistant

______ n. Assists foods teacher in setting up laboratory experiments and in other areas as needed

______ o. Designs appliances while considering consumer needs and desires

______ p. Demonstrates and informs interested people about particular foods to promote sales

______ q. Receives money from customers and makes change; may balance register and prepare bank deposit

______ r. Catches or gathers large quantities of fish for sale or processing

______ s. Takes photographs of food to be included in magazines, newspapers, billboards, or other media

______ t. Conducts surveys and uses other methods to determine consumer preferences for goods and services

______ u. Prepares breads, cakes, cookies, and pastries for purchase by consumer

______ v. Sells large quantities of food at reduced prices to customers for resale

______ w. Responsible for inventory, training and actions of employees, customer relations, advertising, bookkeeping, and banking procedures to ensure profit

______ x. Cooks and seasons food; may estimate and order food supplies and equipment, plan menus, and supervise and coordinate workers

14. Food photographer
15. Baker
16. Food service cashier
17. Teaching aide
18. Market researcher
19. Food wholesaler
20. Supermarket manager
21. Appliance designer
22. Cook
23. Food demonstrator
24. Commercial fisher

4. Match employment opportunities in professional and managerial occupations to the correct descriptions. Place the correct numbers in the blanks provided.

______ a. Writes food and nutrition articles for newspapers, magazines, and other media

______ b. Teaches students variety of subjects including clothing and textiles, food and nutrition, housing and home furnishings, personal and family relationships, child development, home management, and consumer education

______ c. Experiments to find solutions to problems involving food and nutrition

1. Nutrition columnist
2. Research scientist
3. Home economics teacher

______ d. Responsible for entire food service operation including personnel, purchasing, food preparation and serving, advertising, customer relations, bookkeeping, and banking procedures to ensure profit

______ e. Supervises and coordinates activities of workers engaged in unloading, loading, storing, cleaning, and blending grain for milling and shipment

______ f. Studies, analyzes, and evaluates market trends and cycles as related to supply and demand of goods and services

______ g. Studies soil characteristics to determine uses of soils for maximum productivity

______ h. Plans menus and diets, which will provide required food and nutrients for others

______ i. Manages test kitchen procedures and coordinates employees who devise and test recipes using company's products

______ j. Teaches food and nutrition subjects to college students; often involved in conducting research

______ k. Works to improve existing products and develop new products for consumer use

______ l. Studies processes by which the body uses food to build and maintain healthy tissues

______ m. Provides leadership in planning, developing, conducting, and evaluating educational programs in all areas of family living

______ n. Assists interested persons concerning energy awareness, appliances, and kitchen planning

______ o. Operates farm or ranch for purpose of securing maximum continuous profit by using organizational and managerial skills

______ p. Inspects raw materials and finished products, making adjustments to improve product quality

______ q. Tests food for safety and wholesomeness

4. Food service manager/owner
5. Quality-control technologist
6. Public service representative
7. Product designer
8. Farm/ranch manager
9. Extension home economist
10. Professor of nutrition
11. Test kitchen manager
12. Dietitian
13. Food chemist
14. Grain elevator superintendent
15. Market analyst
16. Nutritionist
17. Soil scientist

5. Distinguish between advantages and disadvantages of employment in food-related occupations. Place an "A" for advantages and a "D" for disadvantages in the blanks provided.

_____a. Advancement opportunities are available

_____b. Jobs may lead to lifelong careers

_____c. Hard physical labor may be involved

_____d. Fringe benefits are available

_____e. Working on shifts, weekends, and holidays may be required

_____f. Part-time jobs are usually available, allowing flexible working hours

_____g. Jobs are available in any location

_____h. Working under pressure occurs at times

6. Name types of training available for food-related occupations.

a. ______________________________

b. ______________________________

c. ______________________________

7. Name factors affecting job advancement.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

g. ______________________________

8. Select from the following list personal qualities needed for successful employment. Mark each correct answer with an "X."

_____a. Desire to serve people

_____b. Pleasant personality

_____c. Reliability

_____d. Ability to work under pressure

_____e. Large wardrobe

______f. Poor physical health

______g. Good health habits

______h. Intolerance of people

______i. Dependability and loyalty

______j. Ability to follow instructions

______k. Laziness

______l. Ability to handle criticism

9. Determine personal qualities and training or education required for food-related occupations.

10. Locate related employment opportunities.

11. Evaluate a food-related occupation.

(NOTE: If activities 9-11 have not been finished before to the test, ask your instructor when they should be completed.)

EMPLOYMENT IN FOOD-RELATED OCCUPATIONS
UNIT I

ANSWERS TO TEST

(NOTE: It may be helpful to use your blank test to make a test key. The point system designated in parentheses is intended to be a guideline and should be adapted to meet the needs of each teaching-learning process. The point total is 250.)

1. (12 points)

a. 6
b. 2
c. 4
d. 5
e. 3
f. 1

2. (36 points)

a. 2
b. 1
c. 3
d. 4
e. 9
f. 8
g. 13
h. 7
i. 5
j. 10
k. 6
l. 12
m. 11
n. 15
o. 16
p. 14
q. 18
r. 17

3. (48 points)

a. 6
b. 4
c. 7
d. 5
e. 8
f. 1
g. 2
h. 3
i. 10
j. 9
k. 13
l. 11
m. 12
n. 17
o. 21
p. 23
q. 16
r. 24
s. 14
t. 18
u. 15
v. 19
w. 20
x. 22

4. (34 points)

   a. 1
   b. 3
   c. 2
   d. 4
   e. 14
   f. 15
   g. 17
   h. 12
   i. 11
   j. 10
   k. 7
   l. 16
   m. 9
   n. 6
   o. 8
   p. 5
   q. 13

5. (16 points)

   a. A
   b. A
   c. D
   d. A
   e. D
   f. A
   g. A
   h. D

6. (3 points)

   a. Vocational
   b. Private
   c. College and university

7. (7 points)

   a. Ability to get along and work well with others
   b. Determination to succeed
   c. Length of service
   d. On-the-job training
   e. Recommendation from another employer
   f. Additional education
   g. Successful job performance

8. (24 points)

   a, b, c, d, g, i, l

9. Evaluated to the satisfaction of the instructor (25 points)

10. Evaluated to the satisfaction of the instructor (25 points)

11. Evaluated to the satisfaction of the instructor (20 points)

FOOD FOR GOOD HEALTH
UNIT I

UNIT OBJECTIVE

After completion of this unit, the student should be able to plan for and select foods to meet total daily nutrient intake requirements. This knowledge will be evidenced by completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with food for good health to correct definitions.
2. List reasons people do not eat properly.
3. List dietary needs for life cycle stages.
4. Match nutrients to results of deficiencies.
5. Complete a chart on special diets.
6. Match major digestive organs to correct functions.
7. Arrange in order processing of food in the body.
8. Select from a list functions of food additives in processed foods.
9. Determine function(s) of food additives.
10. Compute number of calories needed to maintain present body weight.
11. Use R.D.A. and Food Composition charts to plan for satisfaction of nutritional needs.
12. Select foods to meet minimum nutritional needs.

FOOD FOR GOOD HEALTH
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Order films, filmstrips, and games planned to supplement unit.

   B. Provide student with objective sheet.

   C. Provide student with information and assignment sheets.

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheets.

   F. Adapt materials for special needs students.

   G. Evaluate students' knowledge to determine if they have achieved competencies established in *Home Economics I* and *Home Economics II* before beginning unit.

   H. Introduce unit with filmstrip teaching kit, *Nutrition: What's In It for You?*

   (NOTE: Available for purchase from J. C. Penney Company, Inc., Educational Relations Department, 1301 Avenue of the Americas, New York, New York 10019.)

   I. Have students brainstorm additional reasons people do not eat properly as identified in Objective #2.

   J. Invite resource person such as dietician, to assist in teaching objectives #3, and #5 to provide additional information on dietary needs for life cycle stages and special diets.

   K. Supplement objective #3, concerning dietary needs for life cycle stages with filmstrip teaching kit, *Food to Live On: Nutrition From the Twenties Through the Nineties.*

   (NOTE: Available for purchase from Tupperware Home Parties, Educational Services, P. O. Box 2353, Orlando, Florida 32802.)

   L. Supplement unit with filmstrip teaching kit, *Meal Planning Series.*

   (NOTE: Available for purchase from Butterick Publishing Company, P. O. Box 1914, Altoona, Pennsylvania 16603.)

   M. Invite biology teacher to assist in teaching objectives #6 and #7 concerning digestion.

N. Supplement unit with filmstrip teaching kit, *How Food Becomes You.*

O. Provide students with calorie charts to assist in completion of Assignment Sheet #2.

P. Have students complete an outside reading from a current article on some aspect of nutrition and/or food selection or preparation.

Q. Utilize resource person (if necessary) to assist in explaining uses of R.D.A. and Food Composition charts to aid in completion of Assignment Sheet #2.

R. Encourage students to watch T.V. food advertising and read food advertisements in newspapers, magazines, or pamphlets to evaluate nutritional information provided in advertisements.

(NOTE: Most advertisements contain no nutritional information.)

S. Assist students in playing "The Nutrition Game" and "The Calorie Game" to emphasize importance of good nutrition and planning.

(NOTE: These games are available for purchase from Graphics Co., P. O. Box 331, Urbana, Illinois 61801.)

T. Encourage students to plan and prepare a series of meals which meet individual and/or family nutritional needs.

U. Have class divide into groups to plan and prepare meals acceptable for people on special diets. If time and facilities permit, include additional diets to those covered in objective #5. It may be necessary to obtain assistance from a dietician to complete this assignment.

V. Allow students to interview a member of an organization who provides meals for those in need to determine what people take advantage of this service, what problems are involved, how the program is funded, benefits and weaknesses of the program, as well as descriptions of meals prepared for special diets.

W. Assist students in preparing and comparing several foods containing additives to comparable foods that do not contain additives. Compare flavor, nutritive value, appearance and length of time foods remain fresh.

X. Encourage students to prepare meals according to menus planned in objective #10.

Y. Encourage students to prepare menus planned in Assignment Sheet #2 as a foods home experience.

Z. Give test.

AA. Reteach if necessary.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Assignment sheets

1. Assignment Sheet #1--Determine Function(s) of Food Additives
2. Assignment Sheet #2--Compute Number of Calories Needed to Maintain Present Body Weight
3. Assignment Sheet #3--Use R.D.A. and Food Composition Charts to Plan for Satisfaction of Nutritional Needs
4. Assignment Sheet #4--Select Foods to Meet Minimum Nutritional Needs

D. Answers to Assignment Sheet #3

E. Test

F. Answers to test

III. Unit references:

A. Medved, Eva. *The World of Food.* rev. ed. Lexington, Massachusetts: Ginn and Company, 1977.

B. Peck, Brinkley Leilani; Moragne, Lenora; Sickler, Mary Suzanne; Washington, Ethel O. *Focus on Food.* New York: Webster Division/ McGraw-Hill Book Company, 1974.

C. Robinson, Corinne H.; and Lawler, Marilyn R. *Normal and Therapeutic Nutrition.* 15th ed. New York: Macmillan Publishing Co., Inc., 1977.

D. Deutsch, Ronald M. *The Family Guide to Better Food and Better Health.* Des Moines, Iowa: Meredith Corporation, 1971.

E. Cote, Patricia. *People, Food, and Science.* Lexington, Massachusetts: Ginn and Company, 1972.

F. Largen, Velda L. *Guide to Good Food.* South Holland, Illinois: The Goodheart-Willcox Company, Inc., 1979.

G. Sneed, Phyllis. *Weigh-Off: An Adult Weight Reduction Program.* Stillwater: Oklahoma State University Extension, 1977.

H. Piltz, Albert. *How Your Body Uses Food.* Rosemont, Illinois: National Dairy Council, 1960.

I. *Nutrition for Athletes: A Handbook for Coaches.* Washington, D.C.: AAHPER Publications, 1971.

J. *Food Additives: Who Needs Them?* rev. Washington, D.C.: Manufacturing Chemists Association, 1978.

K. *Nutrition: What's In It For You?* Filmstrip teaching kit. New York: J.C. Penney Company, Inc., Educational Relations Department, 1974.

L. *Food to Live On: Nutrition From the Twenties Through the Nineties.* Filmstrip teaching kit. Orlando, Florida: Tupperware Home Parties, 1978.

M. *Meal Planning Series.* Filmstrip teaching kit. Altoona, Pennsylvania: Butterick Publishing Company, 1979.

N. *How Food Becomes You.* Filmstrip teaching kit. Oklahoma City, Oklahoma: Dairy Council, Inc., n.d.

O. *Food to Grow On: Nutrition From Newborn Through Teens.* Filmstrip teaching kit. Orlando, Florida: Tupperware Home Parties, 1977.

(NOTE: This filmstrip teaching kit is available for purchase from Tupperware Home Parties, Educational Services, P.O. Box 2353, Orlando, Florida 32802.)

IV. Additional materials:

A. *Mission Nutrition.* 15 min. color film. Evol Productions, 14406 Brad Drive, Rockville, Maryland 20853.

B. *All American Meal.* 11 min. color film. 1971. Barr Films, 3490 E. Foothill Boulevard, Pasadena, California 91107.

C. *For Tomorrow We Shall Diet.* 24 min. color film. 1976. Churchill Films, 622 N. Robertson Boulevard, Los Angeles, California 90069.

(NOTE: The above films are available on a free-loan basis to Oklahoma teachers only from the Oklahoma State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1515 West 6th, Stillwater, Oklahoma 74074.)

D. *The Unfinished Child.* Film produced by March of Dimes. Available on a free-loan basis from local March of Dimes or Regional March of Dimes Office, Suite #310, 5415 Maple Avenue, Dallas, Texas 75235.

E. *Inside My Mom.* Filmstrip and cassete produced by March of Dimes. Available on a free loan basis from local March of Dimes office or Regional March of Dimes Office, Suite #310, 5415 Maple Avenue, Dallas, Texas 75235.

F. *Your Food: Chance or Choice?* Filmstrip teaching kit produced by the National Dairy Council. Order forms may be obtained from Dairy Council, Inc., 1700 North Sooner Road, Oklahoma City, Oklahoma 73111.

FOOD FOR GOOD HEALTH
UNIT I

INFORMATION SHEET

I. Terms and definitions

   A. Nutrition--Science or study of food and how the body uses it

   B. Total daily food intake--Food eaten in one day

      (NOTE: Intake should meet nutritional dietary needs.)

   C. Food additives--Ingredients added to foods during processing or packaging

   D. R.D.A. (Recommended Dietary Allowances)--Suggested nutrient amounts each age group should have each day; designed to meet the basic needs of healthy persons

   E. U.S. R.D.A. (United States Recommended Daily Allowances)--Amounts of nutrients that should be eaten each day to stay healthy; found in nutritional information on food labels

      (NOTE: These allowances represent the average nutrient requirement plus an extra amount to cover differences in the needs of individuals. They are set high enough to meet the needs of almost all healthy people in the United States.)

   F. Fad diet--Diet lacking nutritional needs

      Examples: Grapefruit diet, liquid protein diet, egg and grapefruit diet, liquid diet, commercial diet drinks, diet tablets, diet candy

   G. Digestion--Process body uses to break down food and nutrients into usable parts

   H. Absorption--Process of the body taking in nutrients as they are passed into or through specific organs

      (NOTE: Most absorption takes place in the small intestine.)

   I. Elimination--Process of passing unused materials out of the body

   J. Lactation--Process of secreting milk to provide nourishment to the child from the mother's breast

INFORMATION SHEET

II. Reasons people do not eat properly

(NOTE: In a country where food is plentiful and where people are educated concerning good nutrition, we find that many people are nutritionally deficient.)

A. What is eaten is not important as long as hunger needs are satisfied

(NOTE: This attitude influences what food choices are made.)

B. Time is not taken to plan, prepare, or select foods to supply nutritionally balanced total daily intake

C. Nutritionally balanced meals are not provided by others

(NOTE: This is especially true for infants, children and the elderly who are unable to prepare foods for themselves.)

D. Overly conscious of weight

(NOTE: This is a particular concern of teenagers and pregnant females. During times of rapid growth such as teenage years or of important nutritional needs, these groups tend not to eat foods that are necessary for providing needed nutrients.)

E. Exposed to misleading advertising

F. Not informed about nutrition

G. Do not understand importance of good nutrition

H. Poor eating habits have been established

I. Money and/or food not available

J. Unstable emotional state

K. Drugs, alcohol, and/or tobacco are used

III. Dietary needs for life cycle stages (Assignment Sheets #2 and #3)

(NOTE: Everyone in each life cycle stage has the need for similiar nutrients, but in different amounts.)

A. Pregnancy and lactation

(NOTE: Diet during pregnancy affects both the mother and the unborn child.)

1. Well-balanced diet
2. Increased allowances for almost all essential nutrients at beginning of fourth month

INFORMATION SHEET

3. Increased protein, calcium, and iron

   (NOTE: These are especially important during pregnancy. Protein is needed for growth of the fetus; iron is important so the baby can build up reserves of it before birth since milk, which will be the baby's main source of nourishment, is not a good source of iron. Calcium is needed for well-formed bones and teeth.)

4. Small calorie intake increase

   (NOTE: 300 additional calories are allowed for a pregnant female and 500 additional calories are allowed for a lactating female.)

B. Infancy

(NOTE: Nutrient and calorie needs are high during this stage due to rapid growth taking place and lack of any stored nutrients.)

1. High intake of iron

   (NOTE: Breast milk or formula provides all nutrient needs for an infant 4-6 months of age except iron. Full term babies should have enough iron stored to last for the first three months of life.)

2. High calorie intake

C. Childhood

(NOTE: Nutrient needs vary from one child to another depending on age, growth rate, and activity level.)

1. Enough calories for continuous weight gain
2. Well-balanced diet
3. High protein, vitamin, and mineral intake to promote growth and development

D. Teenage

(NOTE: During these years all teenagers undergo what is called the "adolescent growth spurt." This is a period of rapid growth.)

1. Well-balanced diet
2. Increased calories during adolescent growth spurt

INFORMATION SHEET

D. Adulthood

(NOTE: Habits may need to change to prevent weight gain as people in this life cycle stage become less active and have decreased calorie needs.)

1. Well-balanced diet
2. Decreased calorie intake

E. Later maturity

(NOTE: During this stage organs and tissues are less active or less able to do extra work. Adjustment in calorie intake and preparation of foods will need to be made.)

1. Well-balanced diet
2. Decreased calorie intake

IV. Nutrients and results of deficiencies

(NOTE: It is impossible for average Americans to spot errors in their own nutrition. Some of the signs are very vague and when they do appear, they might be signs of many problems other than nutritional deficiencies. The price of nutritional error today is slight compared to the deficiency diseases common before World War I. The most common problem in nutrition today is overweight.)

NUTRIENTS	RESULTS OF DEFICIENCIES
Carbohydrates	Lack of energy; constipation
Fats	Retarded growth; unhealthly skin
Protein	Slow growth; weak muscles; poor resistance to disease
Calcium	Poor bones and teeth; poor muscles; poor nerve control
Phosphorus	Poor bones and teeth; slow growth
Iron	Tired, run-down feeling; anemia
Iodine	Goiter
Vitamin A	Night blindness and eye disease; slow growth poor skin condition
Vitamin B_1 (thiamine)	Fatigue; poor appetite; slow growth; beriberi

INFORMATION SHEET

NUTRIENTS	RESULTS OF DEFICIENCIES
Vitamin B_2 (riboflavin)	Poor skin; premature aging; poor vision; slow growth
Niacin	Fatigue; poor digestive and nerve functions
Vitamin C (ascorbic acid)	Bruise easily; bleeding gums; fatigue; scurvy
Vitamin D	Poor bones and teeth; rickets

(NOTE: Nutrients work together in the body and are dependent on each other for proper utilization.)

Example: Vitamin D is necessary for utilization of calcium and phosphorus

INFORMATION SHEET

V. Special diets

(NOTE: Some people must adapt meal planning guidelines to meet special needs, while other people do so for personal reasons. All diets should meet individual nutritional needs and should be supervised by a physician. Fad diets should be avoided.)

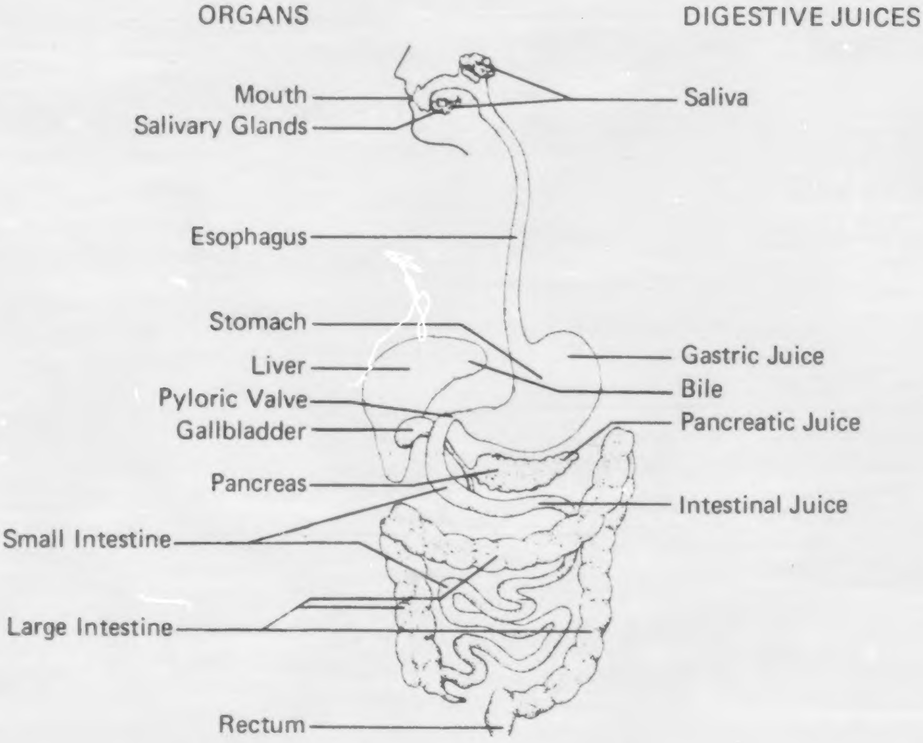
DIET	FOODS ALLOWED	FOODS OMITTED	REASONS FOR DIET
Weight gain	Emphasis on increase of calories as well as increase of nutrients Full meals with high calorie between-meal snacks		Weight gain
Weight loss	Low calorie foods with high nutrient content Decreased calorie intake based on desired weight, activity level, and age	High fat foods High calorie foods with little nutritional value	Weight loss
Low cholesterol	Lean muscle meats (without skin or fat) Skim milk Margarine made with unsaturated fats Liquid vegetable oil	Egg yolk Shellfish Desserts made with cream Whole milk Cream Butter	Avoid or aid in correction of circulatory problems
Sodium restricted	Natural foods prepared without salt Milk, meat in limited amounts Fruits and vegetables without salt Unsalted bread Desserts prepared without salt	Processed foods Salt and other seasonings containing salt Brine prepared foods Food preservatives containing sodium Cultured buttermilk	Prevent or aid in correcting kidney diseases or cardiovascular disorders

INFORMATION SHEET

DIET	FOODS ALLOWED	FOODS OMITTED	REASONS FOR DIET
Bland	Generous amounts of milk and protein foods Refined cereals Simple desserts Ripe bananas, applesauce, baked apples, peaches, pears Decaffeinated coffee, weak tea Carrots, beets, string beans, spinach, squash without seeds, asparagus tips, peas	Fried foods Meats with coarse fiber, tough grissle Coarse foods Highly seasoned foods Fruits and vegetables other other than allowed Pastries and candies Alcoholic beverages	Aid in correcting nausea, ulcers, or colitis
High Iron	Normal diet with high-iron foods Liver and organ meats Red meats All dried fruits Soybeans Molasses		Aid in correcting nutritional anemia Replacement of iron following blood loss

INFORMATION SHEET

VI. Major digestive organs and their functions


ORGANS
DIGESTIVE JUICES
Mouth
Salivary Glands
Saliva
Esophagus
Stomach
Liver
Pyloric Valve
Gallbladder
Gastric Juice
Bile
Pancreatic Juice
Pancreas
Intestinal Juice
Small Intestine
Large Intestine
Rectum

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A. Mouth--Made up of teeth and tongue which break food into small particles and mix foods with *saliva* produced by *salivary glands;* begins digestion of carbohydrates

B. Esophagus--Tube which connects *mouth* to *stomach*; muscles contract to move food to stomach

C. Stomach--Organ where most digestion takes place; food remains here 2-3 hours; hydrochloric acid and other *gastric juices* mix with food; food leaves when it reaches liquid or semi-liquid state (chyme) through *pyloric valve*

(NOTE: Foods leave the stomach in the following order: fluids, carbohydrates, proteins and fats.)

INFORMATION SHEET

D. Small intestine--Bile from *liver*, *intestinal* juice, *pancreatic juice* from the *pancreas*, which has been stored in the *gallbladder*, act upon protein, carbohydrates, and fat to complete digestion; villi in this organ assist in absorbing 90% of the nutrients into blood and lymph systems

(NOTE: The small intestine measures an average of 1 inch in diameter and 23 feet in length.)

E. Large intestine--Absorbs water from undigested material; passes undigestible material on to be eliminated through *rectum*

(NOTE: The average large intestine measures 5-6 feet in length and 3 inches in diameter.)

VII. Order of processing of food in the body

A. Intake

B. Digestion

C. Absorption

D. Elimination

VIII. Functions of food additives in processed foods (Assignment Sheet #1)

A. To improve nutritive value

(NOTE: Nutrients are often added or replaced.)

Examples: Vitamin A, thiamine, niacin, riboflavin, ascorbic acid, vitamin D, iron

B. To improve flavor

(NOTE: Spices and natural or artificial flavors are used to provide us with flavorful foods.)

Examples: Cloves, ginger, amyl acetate, benzaldehyde, carvone

C. To preserve appearance, taste, and wholesomeness

(NOTE: The addition of these types of food additives delay undesirable changes in food. They prevent or inhibit spoilage and discoloration.)

Example: Sodium propionate

INFORMATION SHEET

D. To give and maintain desired consistency

(NOTE: These additives serve as emulsifiers or stabilizers. Emulsifiers permit the distribution of tiny particles of one liquid through another.)

Examples: Lecithin, mono- and diglycerides, gum arabic, methyl cellulose

E. To control acid or alkaline levels

(NOTE: These additives ensure good flavor and ensure that leavening agents used in the baking industry can function properly.)

Examples: Potassium acid tartrate, tartaric acid, sodium bicarbonate, citric acid, lactic acid

F. To give desired and characteristic color

(NOTE: These additives increase the acceptability and attractiveness of products.)

Examples: Artificial colors, carotene, chlorophyll

G. To act as maturing and bleaching agents

(NOTE: These additives change the yellow pigments in wheat flour to white and also improve baking results.)

Examples: Chlorine dioxide, chlorine, potassium bromate and iodate

H. To perform miscellaneous functions

(NOTE: Additives are also used to help retain moisture or keep foods free-flowing.)

Examples: Glycerine, magnesium carbonate

FOOD FOR GOOD HEALTH
UNIT I

ASSIGNMENT SHEET #1--DETERMINE FUNCTION(S) OF FOOD ADDITIVES

NAME ______________________________ SCORE ________________

The addition of additives to foods has caused many arguments the past few years. Food additives are often attacked by people who do not like the idea of having chemicals added to their foods.

Many foods would not exist if it were not for additives. Others would lose taste or storage life. Most foods would even cost more and be less wholesome. Malnutrition related diseases that are now prevented by nutrient additives would reappear.

Careful evaluation of food labels is necessary to ensure that consumers are aware of the presence of food additives.

Obtain two food labels from processed foods. Use the information provided on the labels to complete the following chart. Attach the labels to this assignment sheet after you complete the assignment. It will be necessary to use textbooks, encyclopedias, and other resources to list the functions of additives present.

	FOOD ADDITIVES PRESENT	FUNCTION OF THE ADDITIVE
Label 1	1 ________________	________________________ ________________________
	2 ________________	________________________ ________________________
	3 ________________	________________________ ________________________
	4 ________________	________________________ ________________________

ASSIGNMENT SHEET #1

	FOOD ADDITIVES PRESENT	FUNCTION OF THE ADDITIVE
Label 2	1 ________________	______________________ ______________________
	2 ________________	______________________ ______________________
	3 ________________	______________________ ______________________
	4 ________________	______________________ ______________________

FOOD FOR GOOD HEALTH
UNIT I

ASSIGNMENT SHEET #2--COMPUTE NUMBER OF CALORIES NEEDED TO MAINTAIN PRESENT BODY WEIGHT

NAME ______________________ SCORE ____________

PART I

Controlling food habits and total calorie intake is necessary to reach and maintain a desirable and healthy weight. The following chart gives recommended daily calorie intake per pound for men and women at different activity levels. Use this chart to answer the questions that follow.

ACTIVITY	WOMEN calories/pound	MEN calories/pound
Very light	12	14
Light	13	15
Moderate	14	16
Strenuous	15	17
Very Strenuous	16	18

Formula: Weight x calories/pound = number of calories needed per day to maintain present body weight

Example: For a male weighing 160 pounds and who is moderately active, compute as follows:

160 lbs x 16 = 2560 calories per day

1. What is the estimated number of calories per pound you should consume per day to maintain your present weight? ____________
2. According to the formula stated above, how many calories per day should you have to maintain your present body weight? (Use the space below to compute your answer.)

____

ASSIGNMENT SHEET #2

PART II

Charts providing recommended weights for different people are available from many sources. These charts provide a rough estimate of desirable and healthy weights for different heights, body frames, and age groups.

Use the charts provided below to answer the questions that follow.

WEIGHT/HEIGHT/AGE TABLES

DESIRABLE WEIGHTS FOR MEN

Height (in shoes, 1-inch heels) Feet	Inches	Weight in Pounds (in Indoor Clothing) Small Frame	Medium Frame	Large Frame
5	2	112-120	118-129	126-141
5	3	115-123	121-133	129-144
5	4	118-126	124-136	132-148
5	5	121-129	127-139	135-152
5	6	124-133	130-143	138-156
5	7	128-137	134-147	142-161
5	8	132-141	138-152	147-166
5	9	136-145	142-156	151-170
5	10	140-150	146-160	155-174
5	11	144-154	150-165	159-179
6	0	148-158	154-170	164-184
6	1	152-162	158-175	168-189
6	2	156-167	162-180	173-194
6	3	160-171	167-185	178-199
6	4	164-175	172-190	182-204

DESIRABLE WEIGHTS FOR WOMEN

Height (in shoes; 2-inch heels) Feet	Inches	Weight in Pounds (in Indoor Clothing) Small Frame	Medium Frame	Large Frame
4	10	92-98	96-107	104-119
4	11	94-101	98-110	106-122
5	0	96-104	101-113	109-125
5	1	99-107	104-116	112-128
5	2	102-110	107-119	115-131
5	3	105-113	110-122	118-134
5	4	108-116	113-126	121-138
5	5	111-119	116-130	125-142
5	6	114-123	120-135	129-146
5	7	118-127	124-139	133-150
5	8	122-131	128-143	137-154
5	9	126-135	132-147	141-158
5	10	130-140	136-151	145-163
5	11	134-144	140-155	149-168
6	0	138-148	144-159	153-173

ASSIGNMENT SHEET #2

1. According to the chart, what is the recommended weight range for your height and body frame? ______________________________
2. How does you present weight compare to your recommended weight? _____________
3. What weight do you consider ideal for your height and body frame? _______________
4. How many calories per day should you have to maintain your ideal weight? ________

ASSIGNMENT SHEET #2

PART III

In order to maintain a desirable weight and good health, it is essential to consider nutritional and caloric values of foods when planning total daily intake.

Using nutritional information, calorie charts, and menu planning principles, plan a menu for one day that would enable you to consume the number of calories needed to maintain your desired weight. Use the following chart to complete your menu.

	FOOD	QUANTITY	BASIC FOUR FOOD GROUP	NUMBER OF CALORIES
Breakfast				
Morning Snack				
Lunch				
Afternoon Snack				

ASSIGNMENT SHEET #2

	FOOD	QUANTITY	BASIC FOUR FOOD GROUP	NUMBER OF CALORIES
Evening meal				
Additional snacks				

FOOD FOR GOOD HEALTH
UNIT I

ASSIGNMENT SHEET #3--USE R.D.A. AND FOOD COMPOSITION CHARTS TO PLAN FOR SATISFACTION OF NUTRITIONAL NEEDS

NAME ______________________ SCORE ______________

PART I

Nutritional deficiencies can often be prevented by the addition of foods high in appropriate nutrient content. Good health can also be ensured by the daily intake of nutrients in recommended amounts. In order to determine the amounts of specific nutrients needed by the body it is necessary to study the Recommended Dietary Allowance Chart.

ASSIGNMENT SHEET #3

FOOD AND NUTRITION BOARD, NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL
RECOMMENDED DAILY DIETARY ALLOWANCES, Revised 1979
Designed for the maintenance of good nutrition of practically all healthy people in the U.S.A.

							Fat-Soluble Vitamins			Water-Soluble Vitamins							Minerals					
	Age	Weight		Height		Protein	Vitamin A	Vitamin D	Vitamin E	Vitamin C	Thiamin	Riboflavin	Niacin	Vitamin B6	Folacin	Vitamin B12	Calcium	Phosphorus	Magnesium	Iron	Zinc	Iodine
	(years)	(kg)	(lbs)	(cm)	(in)	(g)	(mg R.E.)	(mg)	(mg or T.E.)	(mg)	(mg)	(mg)	(mg N.E.)	(mg)	(mg)	(mg)	(mg)	(mg)	(mg)	(mg)	(mg)	(mg)
Infants	0.0-0.5	6	13	60	24	kg x 2.2	420	10	3	35	0.3	0.4	6	0.3	30	0.5	360	240	50	10	3	40
	0.5-1.0	9	20	71	28	kg x 2.0	400	10	4	35	0.5	0.6	8	0.6	45	1.5	540	360	70	15	5	50
Children	1-3	13	29	90	35	23	400	10	5	45	0.7	0.8	9	0.9	100	2.0	800	800	150	15	10	70
	4-6	20	44	112	44	30	500	10	6	45	0.9	1.0	11	1.3	200	2.5	800	800	200	10	10	90
	7-10	28	62	132	52	34	700	10	7	45	1.2	1.4	16	1.6	300	3.0	800	800	250	10	10	120
Males	11-14	45	99	157	62	45	1000	10	8	50	1.4	1.6	18	1.8	400	3.0	1200	1200	350	18	15	150
	15-18	66	145	176	69	56	1000	10	10	60	1.4	1.7	18	2.0	400	3.0	1200	1200	400	18	15	150
	19-22	70	154	177	70	56	1000	7.5	10	60	1.5	1.7	19	2.2	400	3.0	800	800	350	10	15	150
	23-50	70	154	178	70	56	1000	5	10	60	1.4	1.6	18	2.2	400	3.0	800	800	350	10	15	150
	51+	70	154	178	70	56	1000	5	10	60	1.2	1.4	16	2.2	400	3.0	800	800	350	10	15	150
Females	11-14	46	101	157	62	46	800	10	8	50	1.1	1.3	15	1.8	400	3.0	1200	1200	300	18	15	150
	15-18	55	120	163	64	46	800	10	8	60	1.1	1.3	14	2.0	400	3.0	1200	1200	300	18	15	150
	19-22	55	120	163	64	44	800	7.5	8	60	1.1	1.3	14	2.0	400	3.0	800	800	300	18	15	150
	23-50	55	120	163	64	44	800	5	8	60	1.0	1.2	13	2.0	400	3.0	800	800	300	18	15	150
	51+	55	120	163	64	44	800	5	8	60	1.0	1.2	13	2.0	400	3.0	800	800	300	10	15	150
Pregnant						+30	+200	+5	+2	+20	+0.4	+0.3	+2	+0.6	+400	+1.0	+400	+400	+150	h	+5	+25
Lactating						+20	+400	+5	+3	+40	+0.5	+0.5	+5	+0.5	+100	+1.0	+400	+400	+150	h	+10	+50

***Reproduced from:** Recommended Dietary Allowances, Ninth edition (1979 in press), with the permission of the National Academy of Sciences, Washington, D.C.*

ASSIGNMENT SHEET #3

In order to determine which foods will provide essential nutrients identified in the R.D.A. Chart it is necessary to study food composition charts.

FOOD COMPOSITION CHART

Ca = Calcium
Cal. = Calories
CHO = Carbohydrate
diam. = diameter

Fe = Iron
Gm. = Gram
" = inches
I.U. = International Unit

Mg. = Milligram
oz. = ounce
H_2O = water
Pro. = Protein

T = Tablespoon
t = teaspoon
Tr. = Trace, or tiny amount
Vit. = vitamin

Food	Measure	H_2O %	Food Energy Cal.	Pro. Gm.	Fat Gm.	CHO Gm.	Ca Mg.	Fe Mg.	Vit. A I.U.	Thiamine Mg.	Riboflavin Mg.	Niacin Mg.	Ascorbic Acid Mg.
Apples, fresh	1 medium, 3" diam.	85	70	Tr.	Tr.	18	8	.4	50	.04	.05	.1	3
Applesauce, sweetened	1 cup	76	230	1	Tr.	60	10	1.3	100	.05	.03	.1	3
Apricots, fresh	3	85	55	1	Tr.	14	18	.5	2,890	.03	.04	.7	10
Apricots, dried, cooked	1 cup	76	240	5	1	62	63	5.1	8,550	.01	.13	2.8	8
Asparagus, fresh, cooked	1 cup cut spears	94	35	4	Tr.	6	37	1.	1,580	.27	.32	2.4	46
Avocado (alligator pear), fresh	½ pear, 4"	74	185	2	18	6	11	.6	310	.12	.21	1.7	15
Bacon, broiled	2 slices, crisp	8	100	5	8	1	2	.5	0	.08	.05	.8	-
Bananas, fresh	1 medium	76	85	1	Tr.	23	8	.7	190	.05	.06	.7	10
Beans, kidney, canned	1 cup	190	230	14	1	42	72	4.6	Tr.	.12	.1	1.6	-
Beans, baked, canned, pork and sweet sauce	1 cup	71	320	16	7	54	141	4.7	340	.16	.1	1.4	5
Beans, snap, cooked	¾ cup	92	30	2	Tr.	7	62	.8	680	.07	.1	.4	13
Beans, Lima, green, cooked	1 cup	71	180	12	1	32	75	4.0	450	.29	.16	2.0	28
Bean sprouts	1 cup	89	40	6	2	4	46	.7	90	.17	.16	.8	4
Beef, hamburger, lean	3 oz.	60	185	23	10	0	10	3.	20	.08	.20	5.1	-
Beef, roast	3 oz.	40	375	17	34	0	8	2.2	70	.05	.13	3.1	-
Beef, dried, creamed	2 oz.	48	115	19	4	0	11	2.9	-	.04	.18	2.2	-
Beef, steak, round, broiled	3 oz.	44	330	20	27	0	9	2.5	50	.05	.16	4.0	-
Beet greens	1 cup, cooked	198	40	3	4	6	188	3.8	10,200	.14	.30	.6	30
Beets, cooked	1 cup diced	91	50	2	Tr.	12	23	.8	40	.04	.07	.5	11

FN - 27-B

ASSIGNMENT SHEET #3

Food	Measure	H_2O %	Food Energy Cal	Pro. Gm.	Fat Gm.	CHO Gm.	Ca Mg.	Fe Mg.	Vit. A I.U.	Thiamine Mg.	Riboflavin Mg.	Niacin Mg.	Ascorbic Acid Mg.
Biscuits, baking powder	3 biscuits, 2" diam.	29	325	7	9.0	52	68	2.3	Tr.	.27	.22	2.	Tr.
Blackberries, fresh	1 cup	84	85	1	1.	19	46	1.3	290	.05	.06	.5	30
Blueberries, fresh	1 cup	83	85	1	1.	21	21	1.4	140	.04	.08	.6	20
Bologna, all meat	8 slices	56	690	27	62.	2	16	4.1	-	.36	.49	6.0	-
Bouillon cubes	1 cube	4	5	1	Tr.	Tr.	-	-	-	-	-	-	-
Bran flakes, enriched	1 oz.	3	85	3	1.	23	20	1.2	0	.11	.05	1.7	0
Bread, corn, yellow, mix	1 piece, 2" sq.	33	150	3	5	23	50	.8	80	.09	.11	.8	Tr.
Bread, rye	1 slice	36	55	2	Tr.	12	17	.4	0	.04	.02	.3	0
Bread, white, enriched	1 slice	36	60	2	1	12	16	.6	Tr.	.06	.04	.5	Tr.
Bread, whole-wheat	1 slice	36	55	2	1	11	23	.5	Tr.	.06	.03	.7	Tr.
Broccoli, flower stalks, cooked	1 cup, boiled	91	40	5	Tr.	7	132	1.2	3,750	.14	.29	1.2	135
Brussels sprouts, cooked	2 cups	88	45	5	1	8	42	1.4	680	.10	.18	1.1	113
Butter	1 T	16	50	Tr.	6	Tr.	1	0	230	-	-	-	-
Buttermilk	1 cup	90	90	9	Tr.	13	298	.1	10	.09	.44	.2	2
Cabbage, Chinese, raw	1 cup	95	15	1	Tr.	3	43	.6	150	.05	.04	-	25
Cabbage, raw	1 cup, shredded	92	25	1	Tr.	5	49	.4	130	.05	.05	.3	47
Cabbage, cooked	1 cup	94	35	2	Tr.	7	75	.5	220	.07	.07	.5	56
Cake, plain, iced	1 cupcake	24	145	2	6	22	26	.2	70	.01	.03	.1	Tr.
Cake, angel food	2" sector	32	110	3	Tr.	24	4	.1	0	Tr.	.06	.1	0
Cantaloupes	1 half melon	91	60	1	Tr.	14	27	.8	6,540	.08	.06	1.2	63
Carrots, cooked	1 cup, diced	91	45	1	Tr.	10	48	.9	15,220	.08	.07	.7	9
Cauliflower, cooked	1 cup	93	25	3	Tr.	5	25	.8	70	.11	.10	.7	66
Celery, green	2 large outer stalks	94	10	Tr.	Tr.	4	32	.2	200	.02	.02	.7	8
Chard, leaves, stalks	½ cup, cooked	94	20	2	.2	3	73	1.8	5,400	.04	.11	.4	16
Cheese, cheddar, American	1 oz.	37	70	4	5	Tr.	128	.2	220	Tr.	.08	Tr.	0
Cheese, cottage	1 cup	78	240	31	9	7	212	.7	380	.07	.56	.2	0
Cherries, red, canned	1 cup, sirup	76	230	2	1	59	36	.8	1,680	.07	.06	.4	13
Chicken, broiled	3 oz.	71	115	20	3	0	8	1.4	80	.05	.16	7.4	-
Chicken, stewed	3½ oz.	46	369	24	29.5	0	10	1.6	1,190	.04	.21	7.8	-
Chicken, roasted	3½ oz. light meat	71	136	24	3.8	0	9	1.7	90	.05	.19	8.8	-
Chocolate, milk, bar	1 oz.	-	151	2.3	10.9	14	58	1.8	40	.04	.14	.3	0
Chocolate, bitter	1 oz.	2	145	3	15	8	22	1.9	20	.01	.07	.4	0
Cocoa, beverage	1 cup, 6 oz.	-	174	7	9	20	224	.9	295	.08	.34	.3	2
Coconut, dried, sweet	2 T, shredded	1	80	.5	6	8	2	.3	0	.01	Tr.	.1	-
Cod, steak, baked	4 oz. before cooking	65	170	28.5	5	0	31	1.	180	.08	.11	3.	-

ASSIGNMENT SHEET #3

Food	Measure	H_2O %	Food Energy Cal	Pro. Gm.	Fat Gm.	CHO Gm.	Ca Mg.	Fe Mg.	Vit. A I.U.	Thiamine Mg.	Riboflavin Mg.	Niacin Mg.	Ascorbic Acid Mg.
Collards, boiled	½ cup	45	30	2.5	.6	5	145	.55	130	.14	.18	1.2	44
Cookies, astd., commercial	3" diam., 1 large	3	120	1.5	18	9	1	.2	20	.01	.01	.1	Tr.
Corn, sweet, canned	1 cup, cream style	81	170	5	2	40	10	1.2	690	.06	.12	2	13
Corn bread, yellow	1 piece, 2" sq.	20	95	3	3	13	34	5	110	.06	.08	.5	Tr.
Corn flakes, enriched	1 cup	4	110	2	Tr.	24	5	1	0	.14	.1	1.2	0
Corn meal, yellow enriched	1 cup, cooked	5	60	0	0	15	9	.8	0	0	0	0	0
Corn sirup	1 T	.75	23	0	0	5.5	0	0	0	0	0	0	0
Cornstarch	1 T	198	290	10	10	42	304	Tr.	420	.08	.42	.2	2
Cornstarch blancmange	1 cup	79	93	17	.9	.5	43	.8	2,170	.16	.08	2.8	2
Crab, cooked	3½ oz.	.8	50	1.2	1.4	6	.8	.2	0	Tr.	.02	.2	0
Crackers, graham	2 med.	6	55	1	1	10	6	.2	0	.01	.03	.2	0
Crackers, saltines	2" square	.1	35	1	1	6	4	.2	0	Tr.	Tr.	.1	0
Cranberries, sauce	1 cup	62	405	20	1	104	17	.6	40	.03	.03	.1	5
Cream, light	1 cup	72	505	7	49	10	245	.1	2,030	.07	.36	.1	2
Cream, whipped	1 T	57	55	Tr.	6	Tr.	11	Tr.	230	Tr.	.02	Tr.	Tr.
Cucumber	6 slices, ½ med.	96	5	Tr.	Tr.	2	8	.2	Tr.	.02	.02	.1	6
Currants, raw, black	¾ cup	84	54	.17	.1	13.1	60	1.1	230	.05	.05	.3	200
Custard	1 cup	154	230	11	12	22	24	.8	700	.08	.38	.2	Tr.
Dandelion greens	1 cup, cooked	90	60	4	1	12	252	3.2	21,060	.24	.29	-	32
Dates	1 cup	22	490	4	1	130	105	5.3	90	.16	.17	3.9	0
Doughnuts, cake	1 average	24	125	1	6	16	13	.4	30	.05	.05	.4	Tr.
Eggs, whole	1 large	74	80	-	6	Tr.	27	1.1	590	Tr.	.15	Tr.	0
Egg, white	1 med.	88	15	4	Tr.	Tr.	3	Tr.	0	.04	.09	Tr.	0
Egg, yolk	1 med.	51	60	3	5	Tr.	24	.9	580	.04	.07	Tr.	0
Endive, raw	2 oz.	93	10	1	Tr.	2	46	1	1,870	.04	.08	.3	6
Farina, cooked	¾ cup, unenriched	107	50	2	.1	10	5	.2	0	.01	.01	.1	0
Figs, fresh	3 small	78	90	1	Tr.	23	40	.7	90	.07	.06	.5	2
Figs, dried	1 large	23	60	1	Tr.	15	26	.6	20	.02	.02	.1	0
Flour, all-purpose	1 cup, sifted	12	400	12	1	84	18	3.2	0	.48	.29	3.8	0
Flour, rye	1 cup, sifted	9	285	8	.8	62	18	.9	0	.12	.06	.5	0
Flour, whole-wheat	1 cup, stirred	12	400	16	2	85	49	4.0	0	.66	.14	5.2	0
Frankfurters, cooked	1	58	155	6	14	.8	3	.8	-	.08	.1	1.3	-
Fudge, with nuts	1 oz.	8	115	1	3	21	22	.3	Tr.	.01	.03	.1	Tr.
Gelatin, dry	1 T	13	35	9	Tr.	-	-	-	-	-	-	-	-
Gelatin dessert, plain	1 cup	84	140	4	5	34	-	-	-	-	-	-	-
Gingerale, pale dry	1 cup	92	70	0	0	18	-	-	0	0	0	0	0

ASSIGNMENT SHEET #3

Food	Measure	H_2O %	Food Energy Cal	Pro. Gm.	Fat Gm.	CHO Gm.	Ca Mg.	Fe Mg.	Vit. A I.U.	Thiamine Mg.	Riboflavin Mg.	Niacin Mg.	Ascorbic Acid Mg.
Gingerbread	1 piece, 2" x 2"	31	175	2	6	29	37	1.3	50	.06	.06	.5	0
Grapes	1 cup	82	65	1	1	15	15	.4	0	.05	.3	.2	3
Grape juice	1 cup	83	165	1	Tr.	42	28	.8	-	.10	.05	.6	Tr.
Grapefruit, pulp only	½ med.	89	55	1	Tr.	14	22	.6	10	.05	.02	.2	52
Grapefruit juice, fresh red	1 cup, unsweetened	90	95	1	Tr.	23	22	.5	1,080	.09	.04	.4	92
Haddock, fresh	3 oz.	66	140	17	5	5	34	1.0	-	.03	.06	2.7	2
Ham, smoked	3 oz., cooked	54	245	18	19	0	8	2.2	0	.40	.16	3.1	-
Ham, smoked	2 oz., canned	55	165	8	14	1	1	1.2	0	.18	.12	1.6	-
Heart, beef, braised	3 oz.	61	160	27	5	1	5	5	20	.21	1.04	6.5	1
Hominy, cooked, yellow	1 cup, unenriched	174	102	2.4	.2	22	2	.2	120	.04	.02	.4	0
Honey	1 T	17	65	Tr.	0	17	-	1.0	1	0	Tr.	.01	0
Honeydew	1 wedge	91	33	.8	.3	7.7	14	.4	40	.04	.03	.6	23
Ice cream, plain	1 slice	62	145	3	9	15	87	.1	370	.03	.13	.1	1
Jelly	1 T	29	55	Tr.	Tr.	14	4	.3	Tr.	Tr.	.01	Tr.	1
Kale, cooked	1 cup	91	30	4	1	4	147	1.3	8,140	-	-	-	68
Kidney, veal	3 oz.	155	113	16.6	4.6	.1	-	4	-	-	-	-	6
Kohirabi, cooked	1 cup	138	40	3	.2	8	50	.4	30	.1	.04	.4	64
Lamb, chops, broiled	3 oz., ¾" thick	47	400	25	33	0	10	1.5	-	.14	.25	5.6	-
Lamb, roast, shoulder	3 oz.	50	285	18	23	0	9	1.0	-	.11	.20	4.0	-
Lemon juice, fresh	1 cup	-	60	1	Tr.	20	17	.5	40	.08	.03	.2	113
Lemon juice	1 T	91	5	Tr.	Tr.	1	1	.1	Tr.	Tr.	Tr.	Tr.	7
Lettuce, head, iceberg	1 head, 4¾" diam.	96	60	4	Tr.	13	91	2.3	1,500	.29	.27	1.3	29
Lettuce, leaf	2 large	94	10	1	Tr.	2	34	.7	950	.03	.04	.2	9
Liver, beef, fried	2 oz.	57	130	15	6	3	6	5.0	30,280	.15	2.32	9.4	15
Liver, pork, fried	2 oz.	41	180	22	9	2	11	21.8	11,180	.26	3.3	16.7	17
Lobster, canned	2/3 cup	77	95	18.5	2	.3	65	.8	-	.1	.07	-	-
Loganberries, canned	1 cup	172	110	1.4	1	26	54	1.7	280	.04	.1	.4	34
Macaroni and cheese	1 cup, baked	58	470	18	24	44	398	2	950	.22	.44	2	Tr.
Macaroni, cooked	1 cup, enriched	64	190	6	1	39	14	1.4	0	.23	1.9	1.9	0
Mackerel, cooked with butter	3 oz. Atlantic	62	200	19	13	0	5	1.0	450	.13	6.5	6.5	-
Marmalade	1 T	29	55	Tr.	Tr.	14	4	.2	Tr.	Tr.	.01	Tr.	Tr.
Mayonnaise	1 T	15	110	Tr.	12	Tr.	3	.1	40	Tr.	.01	Tr.	-
Milk, whole, fresh	1 cup	87	160	9	9	12	288	.1	350	.08	.42	.1	2
Milk, skim	1 cup	90	90	9	Tr.	13	298	.1	10	.10	.44	.2	2
Milk, condensed, sweetened	1 cup	27	980	25	27	166	802	.3	1,090	.23	1.17	.5	3
Milk, evaporated	1 cup	74	345	18	20	24	635	.3	820	.10	.84	.5	3

ASSIGNMENT SHEET # 3

Food	Measure	H_2O %	Food Energy Cal.	Pro. Gm.	Fat Gm.	CHO Gm.	Ca Mg.	Fe Mg.	Vit. A I.U.	Thiamine Mg.	Riboflavin Mg.	Niacin Mg.	Ascorbic Acid Mg.
Milk, malted, dry	1 T	.2	35	1	.7	6	23	.2	80	.03	.04	Tr.	0
Molasses, light	1 T	24	50	-	-	13	33	.9	-	.01	.01	Tr.	-
Muffins, enriched	1 med.	38	140	4	5	20	50	.8	50	.08	.11	.7	Tr.
Mushrooms, canned	1 cup	93	40	5	Tr.	6	15	1.2	Tr.	.04	.60	4.8	4
Mustard greens	1 cup, cooked	93	35	3	1	6	193	2.5	8,120	.11	.19	.9	68
Noodles, cooked	1 cup, enriched	70	200	7	2	37	16	1.4	110	.23	.14	1.8	0
Oatmeal, cooked	1 cup	86	130	5	2	23	21	1.4	0	.19	.05	.3	0
Oil, salad	1 T	91	30	2	.3	6	92	.5	490	.13	.18	.9	.2
Okra, cooked	8 pods, 3" long	0	25	2	Tr.	5	78	.4	420	.11	.15	.8	17
Oleomargarine, fortified	1 T	16	50	Tr.	6	Tr.	1	0	230	-	-	-	0
Olives, green	4 med.	78	15	Tr.	2	Tr.	8	.2	40	-	-	-	-
Olives, ripe	3 small	73	15	Tr.	2	Tr.	9	.1	10	Tr.	Tr.	-	-
Onions, cooked	1 cup	92	60	3	Tr.	14	50	.8	80	.06	.06	.4	14
Onions, raw	1 T	89	40	2	Tr.	10	30	.6	40	.04	.04	.2	11
Onions, green	6 small	88	20	1	Tr.	5	20	.3	Tr.	.02	.02	.2	12
Oranges, raw	1 med.	85	60	2	Tr.	16	49	.5	240	.12	.05	.5	75
Orange juice, fresh	¾ cup	88	115	2	1	26	27	.7	500	.22		.9	122
Oysters, Eastern, raw	1 cup	85	160	20	4	8	226	13.2	740	.33	.43	6.0	-
Oysters, Pacific, raw	1 cup	84	200	11	12	11	269	3.3	640	.13	.41	1.6	-
Parsnips, cooked	1 cup	82	100	2	1	23	70	.9	50	.11	.13	.2	16
Peaches, fresh	1 med., 2" diam.	89	35	1	Tr.	10	9	.5	1,320	.02	.05	1.0	7
Peanut butter	1 T	2	95	4	8	3	9	.3	-	.02	.02	2.2	-
Peanuts, roasted	1 cup	2	840	37	72	27	107	3.0	-	.46	.46	24.7	0
Pears, fresh	1 med., 3" x 2½" diam.	83	100	1	1	25	13	.5	20	.04	.07	.2	7
Peas, green	1 cup, boiled	82	115	9	1	19	37	2.9	860	.44	.17	3.7	33
Peas, canned, drained	1 cup	83	165	9	1	31	50	4.2	1,120	.23	.13	2.2	22
Peas (baby food)	1 oz.	86	15	1	Tr.	3	3	.4	140	.02	.02	.4	3
Pecans	2 T. chopped	6	100	2	10	2	10		20	.12	.02	.2	Tr.
Peppers, green	1 med.	93	15	1	Tr.	3	6	.4	260	.05	.05	.3	79
Pie, apple	1 1/6 9" pie	48	345	3	15	51	11	.4	40	.03	.02	.5	1
Pie, lemon meringue	1 1/6 9" pie	47	305	4	12	45	17	.6	200	.04	.10	.2	4
Pineapple, fresh	1 cup, no sugar	85	75	1	Tr.	19	24	.7	100	.12	.04	.3	24
Plums, fresh	2 med.	81	25	Tr.	Tr.	7	7	.3	140	.02	.02	.3	3
Popcorn, popped, oil and salt	1 cup	3	65	1	3	8	1	.3	-	-	.01	.2	0
Pork, chops, broiled	1 med. thick	42	260	16	21	0	8	2.2	0	.63	.18	3.8	-
Pork, sausage, cooked	3 links	35	540	21	50	Tr.	8	2.7	0	.89	.39	4.2	-

ASSIGNMENT SHEET # 3

Food	Measure	H_2O %	Food Energy Cal.	Pro. Gm.	Fat Gm.	CHO Gm.	Ca Mg.	Fe Mg.	Vit. A I.U.	Thiamine Mg.	Riboflavin Mg.	Niacin Mg.	Ascorbic Acid Mg.
Potato, white, baked	1 med.	75	90	3	Tr.	21	9	.7	Tr.	.10	.04	1.7	20
Potato, white, boiled, unpeeled	1 med.	80	105	3	Tr.	23	10	.8	Tr.	.13	.05	2.0	22
Potato, white, mashed	1 cup	80	185	4	8	24	47	.8	330	.16	.10	1.9	18
Potato, french fried	10 pieces	45	155	2	7	20	9	.7	Tr.	.07	.04	1.8	12
Potato chips	10 large, 2" diam.	2	115	1	8	10	8	.4	Tr.	.04	.01	1.0	3
Potato, sweet, baked	1 med.	64	155	2	1	36	44	1.0	8,190	.10	.07	.7	24
Prunes, dried, softened	4 med.	28	70	1	Tr.	18	14	1.1	440	.02	.04	.4	1
Prune juice, canned	1 cup	80	200	1	Tr.	49	36	10.5	-	.08	.03	1.1	4
Puffed rice	1 cup	4	50	1	Tr.	13	3	.3	0	.06	.01	.6	0
Puffed wheat	1 cup	3	105	4	Tr.	22	8	1.2	0	.15	.07	2.2	0
Pumpkin, canned	1 cup	90	75	2	1	18	57	.9	14,590	.07	.12	1.3	12
Radishes	4 small	94	5	Tr.	Tr.	1	12	.4	Tr.	.01	.01	.1	10
Raisins, dried	1 cup	18	460	4	-	124	99	5.6	30	.18	.13	.9	2
Raspberries, black	2/3 cup	81	75	2	1	16	30	.9	Tr.	.03	.09	.9	18
Raspberries, red	2/3 cup		70	-	1	17	27	1.1	160	.04	.11	1.1	31
Rhubarb, cooked, with sugar	1 cup	63	385	1	Tr.	98	212	1.6	220	.06	.15	.7	17
Rice, cooked, brown	1 cup	70	120	2.5	.6	26	12	.5	0	.09	.02	1.4	0
Rice, cooked, white	1 cup	73	185	3	Tr.	41	17	1.5	0	.19	.01	1.6	0
Rutabagas, cooked	1 cup, diced	144	60	1.4	.2	14	94	.4	880	10	.10	1.2	42
Salad dressing, boiled	1 T	68	30	1	2	3	15	1	80	.10	.03	Tr.	Tr.
Salad dressing, French	1 T	39	60	Tr.	6	3	2	1	-	-	-	-	-
Salmon, broiled	1 steak, 3½ oz.	63	180	27	7	0	-	1.2	160	.16	.06	9.8	0
Salmon, pink, canned	3 oz.	71	120	17	5	0	167	.7	60	.03	.16	6.8	-
Sardines, Atlantic, in oil	3 oz. can	64	170	20	10	0	20	.5	20	.11	.22	7.3	-
Sardines, Pacific, in oil	3 oz. can	-	-	-	-	-	-	-	-	.01	3	7.4	-
Sauerkraut, canned	1 cup	93	45	2	Tr.	9	85	1.2	120	.07	.09	.4	33
Sherbet, orange	1 cup	67	260	2	2	59	31	Tr.	110	.02	.06	Tr.	4
Shredded wheat	1 oz.	7	100	3	1	23	18	1.0	0	.06	.03	1.2	0
Shrimp, canned	3 oz., drained	70	100	21	1	1	98	2.6	50	0	.03	1.5	0
Soup, pea, canned	1 cup, diluted	86	130	6	-	23	44	1.0	340	05	.05	1.0	7
Soup, tomato	1 cup	90	90	2	2	16	15	.7	1,000	.06	.05	1.1	12
Soup, vegetable, beef	¾ cup	92	80	3	2	14	20	.8	3,250	.05	.02	1.2	-
Spinach, fresh	1 cup, cooked	92	40	5	1	6	167	4.0	14,580	.13	.25	1.0	50
Squash, winter, yellow	1 cup, baked	81	130	4	1	32	57	1.6	8,610	.10	.27	1.4	27
Strawberries, fresh	1 cup	90	55	1	1	13	31	1.5	90	.04	.10	1.0	88
Sugar, granulated	1 T	Tr.	45	0	0	6.8	0	.1	0	0	0	0	0

ASSIGNMENT SHEET # 3

Food	Measure	H_2O %	Food Energy Cal.	Pro. Gm.	Fat Gm.	CHO Gm.	Ca Mg.	Fe Mg.	Vit. A I.U.	Thiamine Mg.	Riboflavin Mg.	Niacin Mg.	Ascorbic Acid Mg.
Sugar, powdered	1 T	Tr.	30	0	0	8	0	Tr.	0	0	0	0	0
Sugar, brown	1 T	.25	51	0	0	13.1	11.7	1.4	0	0	0	0	0
Swordfish, cooked	1 steak, 3 oz.	65	150	24	5	0	23	1.1	1,750	.03	.04	9.3	0
Tapioca, cream	½ cup	13	535	1	Tr.	131	15	.6	0	0	0	0	0
Tomato, raw	1 med.	94	35	2	Tr.	7	20	.8	1,350	.10	.06	1.0	34
Tomato juice, canned	1 cup	94	45	2	Tr.	10	17	2.2	1,940	.13	.07	1.8	39
Tongue, beef	3 oz.	61	210	18	14	Tr.	6	1.9	-	.04	.25	3.0	-
Tunafish, canned	3 oz.	61	170	24	7	0	7	1.6	70	.04	.10	10.1	-
Turkey, roasted	3½ oz., light meat	62	175	33	4	0	0	1.2	-	.05	.14	11.1	0
Turnip greens, cooked	1 cup	93	30	3	Tr.	5	267	1.6	9,140	.21	.36	.8	100
Turnips, cooked	1 cup	94	35	1	Tr.	8	54	.6	Tr.	.06	.08	.5	33
Veal, cutlet, broiled	3 oz., cooked	60	185	23	9	-	9	2.7	-	.06	.21	4.6	-
Veal, roast	3 oz.	55	230	23	14	0	10	2.9	-	.11	.26	6.6	-
Waffles, baked	1 waffle, enriched	41	210	7	7	28	85	1.3	250	.13	.19	1.0	Tr.
Walnuts, English	1 T, chopped	4	50	1	5	1	8	.2	Tr.	.03	.01	.1	Tr.
Watercress	10 av. sprigs	9	2	.2	Tr.	.3	815	.2	490	.01	.02	.7	8
Watermelon, 10" x 16" melon	1/16 melon	93	115	2	1	27	30	2.1	2,510	.13	.13	.1	30
White sauce, med.	1 cup	73	430	10	33	23	305	.5	1,220	.12	.44	.6	Tr.
Yeast, compressed	1 oz. cake	71	25	3	Tr.	3	4	1.4	Tr.	.20	.47	3.2	Tr.

ASSIGNMENT SHEET #3

Use the R.D.A. and Food Composition charts on the preceeding pages to complete the questions that follow. Use the R.D.A. chart to determine the quantity of nutrients needed for the person identified. Next use the Food Composition charts to list quantities of foods to be eaten to meet this nutrient need and the amounts of nutrients and calories provided by this food. List foods and nutrients provided that will equal or exceed nutrients needed for the specific person. Total the quantities provided by foods and compare to quantities of nutrients needed.

NUTRIENT	QUANTITY OF NUTRIENT NEEDED	MEASURE	FOODS TO BE EATEN TO MEET THIS NEED	QUANTITY OF NUTRIENT PROVIDED BY THIS FOOD	CALORIES
Example:					
Iron (Fe)	Male, 16				
	18 mg	1 cup	Apricots, dried	5.1	240
		3/4 cup	Beans, snap cooked	4.7	30
		8 slices	Bologna, all meat	4.1	690
		1 cup	Peanuts, roasted	3.0	840
		1 med. thick	Porkchops, broiled	2.2	260
			TOTAL (NOTE: Total should equal or exceed quantity of nutrient needed.)	19.1	
	1. Female, 17				
			TOTAL		

ASSIGNMENT SHEET #3

NUTRIENT	QUANTITY OF NUTRIENT NEEDED	MEASURE	FOODS TO BE EATEN TO MEET THIS NEED	QUANTITY OF NUTRIENT PROVIDED BY THIS FOOD	CALORIES
Calcium	2. Lactating Female				
			TOTAL		
	3. Child, 1 year old				
			TOTAL		

ASSIGNMENT SHEET #3

NUTRIENT	QUANTITY OF NUTRIENT NEEDED	MEASURE	FOODS TO BE EATEN TO MEET THIS NEED	QUANTITY OF NUTRIENT PROVIDED BY THIS FOOD	CALORIES
Vitamin C (Ascorbic Acid)	4. Lactating Female				
			TOTAL		
	5. Male, 11				
			TOTAL		

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ASSIGNMENT SHEET #3

NUTRIENT	QUANTITY OF NUTRIENT NEEDED	MEASURE	FOODS TO BE EATEN TO MEET THIS NEED	QUANTITY OF NUTRIENT PROVIDED BY THIS FOOD	CALORIES
Thiamine (Vitamin B_1)	6. Female, 65				
			TOTAL		
	7. Male, 55				
			TOTAL		

ASSIGNMENT SHEET #3

NUTRIENT	QUANTITY OF NUTRIENT NEEDED	MEASURE	FOODS TO BE EATEN TO MEET THIS NEED	QUANTITY OF NUTRIENT PROVIDED BY THIS FOOD	CALORIES
Vitamin A	8. Child, 5				
			TOTAL		
	9. Male, 13				
			TOTAL		

ASSIGNMENT SHEET #3

NUTRIENT	QUANTITY OF NUTRIENT NEEDED	MEASURE	FOODS TO BE EATEN TO MEET THIS NEED	QUANTITY OF NUTRIENT PROVIDED BY THIS FOOD	CALORIES
Protein	10. Male, 16				
			TOTAL		
	11. Female, 17				
			TOTAL		

ASSIGNMENT SHEET #3

PART II

CONCLUSIONS:

After studying and using the RDA chart, what differences in the recommended daily allowances do you find between each of the life cycle stages, males, and females?

FOOD FOR GOOD HEALTH
UNIT I

ASSIGNMENT SHEET #4--SELECT FOODS TO MEET MINIMUM NUTRITIONAL NEEDS

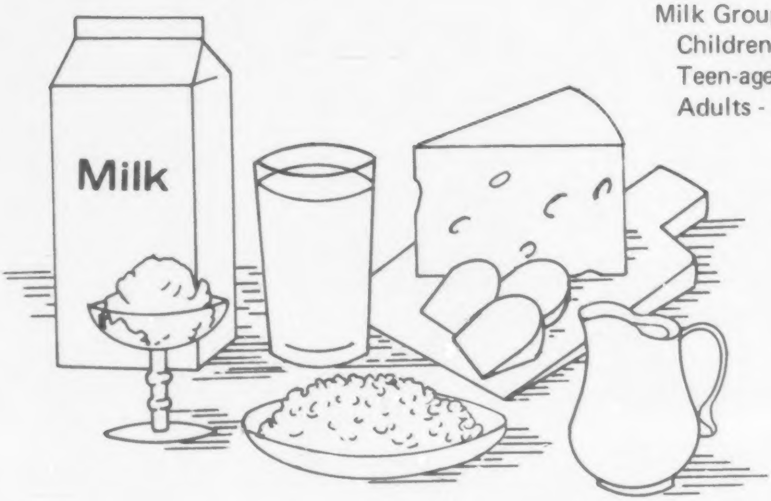
NAME ______________________ SCORE ______________

People are healthy and strong only if they have the right kinds of food in the correct amounts. Today, lack of nutrient intake is a major health problem. People select food, regardless of nutrient content to satisfy hunger and other needs. People in different life cycle stages, except infants and those on special diets, can eat the same basic meals. Certain nutrients are required by all people, yet what foods people eat in order to fulfill their nutrient requirements will differ. Regardless of the number of meals eaten, the total food intake for the day should provide necessary nutrients to allow the body to function at its best.

One of the most helpful resources for nutritional food planning or selection is the Basic Four Food Group Guide. This guide divides foods into four groups and recommends number of servings that should be eaten per day from each group.

If foods are consumed in quantities recommended by this guide, a large percentage of the Recommended Dietary Allowances (R.D.A.) will be met.

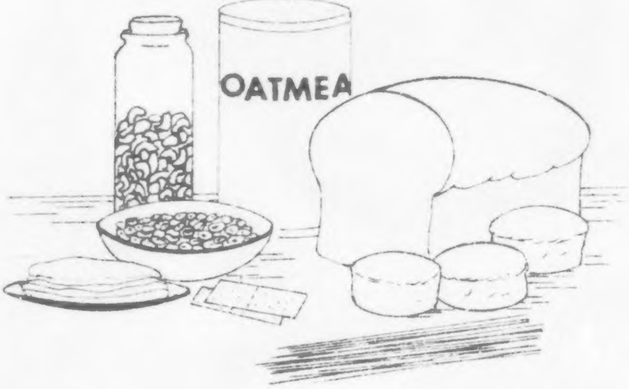
Basic Four Food Groups

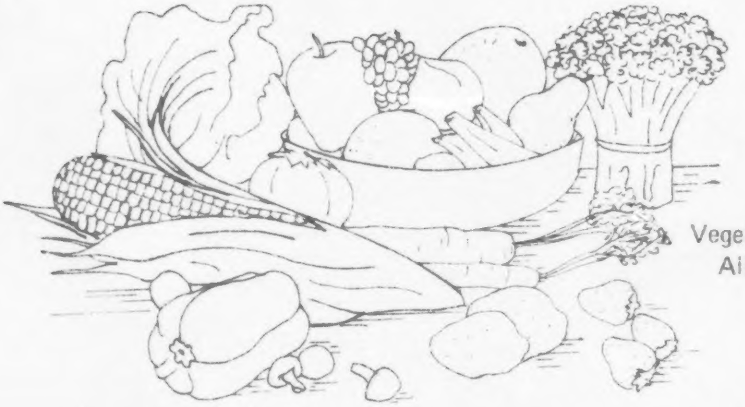


Milk Group:
- Children - 3 or more glasses
- Teen-agers - 4 or more glasses
- Adults - 2 or more glasses

ASSIGNMENT SHEET #4

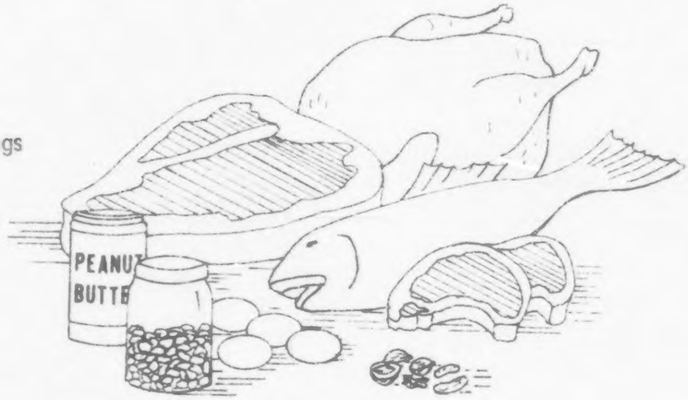
Bread and Cereal Group:
All ages - 4 or more servings





Vegetable and Fruit Group:
All ages - 4 or more servings

Meat Group:
All ages - 2 or more servings


PEANUT
BUTTE

ASSIGNMENT SHEET #4

PART I

It is your evening to plan and prepare this meal for your family and unexpected company. Your grandfather from out of town has just arrived for a visit. You decide to take your family and eat out as a celebration to welcome grandfather to town.

It is not always easy to find one place to eat where each person in a large group will be satisfied with the meal. You decide to take your family to the local cafeteria. The quality and selection of food and service is always good there.

Each person in your group has had the following foods to eat:

BREAKFAST

Orange Juice
Toast

LUNCH

Hot Dog
(with chili)
Potato Chips
Soda Pop

Select foods that are being served on the cafeteria line for each of your guests. These food selections must be made for each individual considering:

1. What foods have been eaten already.
2. What foods need to be eaten at this meal to ensure total daily intake of requirements of the Basic Four Food Groups.

   (NOTE: You may also want to use R.D.A. and Food Composition Charts to assist in completing this assignment.)

The following foods are available on the cafeteria line:

SALADS

Chef salad
Orange gelatin, fruit, and vegetable salad
Bean salad
Strawberry-banana salad
Fresh fruit salad
Cucumber vegetable salad
Marinated vegetable salad
Pea salad
Mushroom salad
Cottage cheese

MEATS

Baked codfish
Fried halibut
Roast beef and natural gravy
Chicken fried steak and white gravy
Fried chicken
Salisbury steak
Pork chops, fried

ASSIGNMENT SHEET #4

HOT VEGETABLES

Mashed potatoes
Candied sweet potatoes
Fried okra
Corn
Green beans
Spinach
Beets
Asparagus
Broccoli

BEVERAGES

Water
Milk
Tea
Coffee
Carbonated beverages
Hot chocolate

MISC.

Sugar
Butter
Artificial sweetener

BREAD PRODUCTS

Hot rolls
Corn bread
White bread
Blueberry muffins
Garlic bread
Rye bread
Crackers

DESSERTS

Bread pudding
Custard pudding
Strawberry shortcake
Devil's food cake
Pecan pie
Peach pie
Apple pie
Chocolate pie
Banana pie
Pumpkin pie
Custard pie
Apple cobbler
Apple dumplings

In the spaces provided below, write food selections for each of the following people.

1. Jerry, your brother, is a 16 year-old junior in high school. It is football season and he is a starting player on the football team.

____

____

____

____

____

____

ASSIGNMENT SHEET #4

2. Kathy, your sister, is 23 and in her 8th month of pregnancy. She teaches full-time at the local elementary school.

____

____

____

____

____

____

3. Tom, your grandfather, is 70 years old and fairly active. He has characteristics of his age group. He fails to get enough nutrients. He also has problem teeth, and poor digestion and appetite. He needs to avoid many high calorie foods.

____

____

____

____

____

____

4. Michelle, your niece, is four years old and very active. She is going through a slow period of growth development. She enjoys finger foods and does not like milk.

____

____

____

____

____

____

ASSIGNMENT SHEET #4

5. George, your father, is 45 years old. He is having a little trouble adjusting to a new "desk" job, and is gaining weight due to lack of exercise.

____

____

____

____

____

____

6. Yourself.

____

____

____

____

____

____

ASSIGNMENT SHEET #4

PART II

1. What problems did you have when planning the meals for you and your guests in Part I of this assignment?

2. What conclusions can you draw from this assignment?

Did your conclusions include any of the following?

If so, which ones?

a. The total daily intake of food for a person is more important than if this food is divided into 2, 3, 4, or 5 meals.

b. Having nutritious intake is needed for good health and well-being.

c. All members of a family need the same nutrients, but the amounts and preparation methods vary with the age, sex, and activity of each person.

d. Eating habits are established early in life.

e. It is almost impossible to select foods for one meal that will meet the Basic Four Food Group requirements if one has not eaten well at other meals.

ASSIGNMENT SHEET #4

PART III

1. List the foods and the quantities of each that you ate yesterday in the spaces provided below. Use a calorie chart to assist you in estimating the number of calories in each.

BREAKFAST

Foods	Quantities	Calories

LUNCH

Foods	Quantities	Calories

FN - 49-B

ASSIGNMENT SHEET #4

DINNER

Foods	Quantities	Calories

OTHER

Foods	Quantities	Calories

ASSIGNMENT SHEET #4

2. What additional foods (if any) could you have eaten to ensure that your total daily intake could have met the Basic Four Food Group and calorie requirements?

____

____

____

3. What foods (if any) could you have eliminated to ensure that your total daily intake could have met the Basic Four Food Group and calorie requirements?

____

____

____

FOOD FOR GOOD HEALTH
UNIT I

ANSWERS TO ASSIGNMENT SHEET #3

1. 18 mg
2. 1,200 mg
3. 800 mg
4. 80 mg
5. 45 mg
6. 1.0 mg
7. 1.2 mg
8. 12 mg
9. 18 mg
10. 54 g
11. 48 g

FOOD FOR GOOD HEALTH
UNIT I

TEST

NAME ______________________ SCORE ______________

1. Match terms associated with food for good health to the correct definitions. Place the correct numbers in the blanks provided.

_____a. Process body uses to break down food and nutrients into usable parts

_____b. Ingredients added to foods during processing or packaging

_____c. Process of passing unused materials out of the body

_____d. Food eaten in one day

_____e. Diet lacking nutritional needs

_____f. Science or study of food and how the body uses it

_____g. Process of the body taking in nutrients as they are passed into or through specific organs

_____h. Suggested nutrient amounts each age group should have each day; designed to meet the basic needs of healthy persons

_____i. Amounts of nutrients that should be eaten each day to stay healthy; found in nutritional information on food labels

_____j. Process of secreting milk to provide nourishment to the child from the mother's breast

1. Nutrition
2. Total daily food intake
3. Lactation
4. Food additives
5. R.D.A. (Recommended Daily Allowances)
6. U.S. R.D.A. (United States Recommended Daily Allowances)
7. Fad diet
8. Digestion
9. Absorption
10. Elimination

2. List seven reasons people do not eat properly.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

g. ______________________________

3. List two dietary needs for each of the life cycle stages listed below.
   a. Pregnancy and lactation
      1) ______________________________
      2) ______________________________
   b. Childhood
      1) ______________________________
      2) ______________________________
   c. Teenage
      1) ______________________________
      2) ______________________________
   d. Adulthood
      1) ______________________________
      2) ______________________________

4. Match nutrients to the results of deficiencies. Place the correct numbers in the blanks provided.

______ a. Goiter

______ b. Retarded growth; unhealthy skin

______ c. Fatigue; poor digestive and nerve functions

______ d. Poor bones and teeth; poor muscles; poor nerve control

______ e. Night blindness and eye disease; slow growth; poor skin condition

______ f. Poor bones and teeth; rickets

______ g. Slow growth; weak muscles; poor resistance to disease

______ h. Bruise easily; bleeding gums; fatigue; scurvy

1. Fats
2. Protein
3. Calcium
4. Iodine
5. Vitamin A
6. Niacin
7. Vitamin C
8. Vitamin D

_____i. Poor bones and teeth; slow growth

_____j. Poor skin; premature aging; poor vision; slow growth

_____k. Tired, run-down feeling; anemia

_____l. Fatigue; poor appetite; slow growth; beriberi

9. Vitamin B_2 (riboflavin)
10. Vitamin B_1 (thiamine)
11. Phosphorus
12. Iron

5. Complete the following chart on special diets by writing the correct information in the blanks provided.

DIET	FOODS ALLOWED	FOODS OMITTED	REASONS FOR DIET
Weight gain	Emphasis on increase of calories as well as increase of nutrients Full meals with high calorie between-meal snacks		a. ____________________
Weight loss	Low calorie foods with high nutrient content Decreased calorie intake based on desired weight, activity level, and age	b. ________________ ________________ ________________ ________________ ________________	Weight loss
Low cholesterol	c. ____________________ ____________________ ____________________ ____________________ ____________________ ____________________ ____________________	Egg yolk Shellfish Desserts made with cream Whole milk Cream Butter	Aids in correction of circulatory problems
Sodium restricted	Natural foods prepared without salt Milk, meat in limited amounts Fruits and vegetables without salt Unsalted bread Desserts prepared without salt	Processed foods Salt and other seasonings containing salt Brine prepared foods Food preservatives containing sodium Cultured buttermilk	d. ____________________ ____________________ ____________________

DIET	FOODS ALLOWED	FOODS OMITTED	REASONS FOR DIET
Bland	Generous amounts of milk and protein foods Refined cereals Simple desserts Ripe bananas, applesauce, baked apples, peaches, pears Decaffeinated coffee, weak tea Carrots, beets, string beans, spinach, squash without seeds, asparagus tips, peas	Fried foods Meats with coarse fiber, tough grissle Coarse foods Highly seasoned foods Fruits and vegetables other than allowed Pastries and candies Alcoholic beverages	e. ____________________ ____________________ ____________________
High iron	f. ____________________ ____________________ ____________________ ____________________ ____________________		Aid in correcting nutritional anemia Replacement of iron following blood loss

6. Match major digestive organs to the correct functions by placing the appropriate numbers in the blanks provided.

______ a. *Bile* from *liver*, *intestinal juices, pancreatic juice* from the *pancreas* which has been stored in the *gallbladder,* act upon protein, carbohydrates, and fat to complete digestion; villi in this organ assist in absorbing 90% of nutrients into blood and lymph system

______ b. Tube which connects *mouth* to *stomach*; muscles contract to move food to stomach

______ c. Absorbs water from undigested material; passes undigestible material on to be eliminated through *rectum*

______ d. Organ where most digestion takes place; food remains here 2-3 hours; hydrochloric acid and other *gastric juices* mix with food; food leaves when it reaches a liquid or semi-liquid state (chyme) through *pyloric valve*

______ e. Made up of teeth and tongue which break food into small particles and mix foods with *saliva* produced by *salivary glands;* begins digestion of carbohydrates

1. Mouth
2. Esophagus
3. Stomach
4. Small intestine
5. Large intestine

7. Arrange in order processing of food in the body. Place a "1" in front of the first step, a "2" for the second, and so on.

______ a. Absorption

______ b. Digestion

______ c. Elimination

______ d. Intake

8. Select from the list below functions of food additives in processed foods by placing an "X" in the appropriate blanks.

______ a. To improve flavor

______ b. To act as maturing and bleaching agents

______ c. To decrease number of calories

______ d. To control acid or alkaline levels ______e. To give and maintain desired consistency

______f. To increase bulk

______g. To improve nutritive value

______h. To give desired and characteristic color

______i. To substitute calories for nutrients

______j. To decrease cost

______k. To preserve appearance, taste, and wholesomeness

9. Determine function(s) of food additives.
10. Compute number of calories needed to maintain present body weight.
11. Use R.D.A. and Food Composition charts to plan for satisfaction of nutritional needs.
12. Select foods to meet minimum nutritional needs.

(NOTE: If activities 9-12 have not been accomplished prior to the test, ask your instructor when they should be completed.)

FOOD FOR GOOD HEALTH
UNIT I

ANSWERS TO TEST

(NOTE: It may be helpful to use your blank test to make a test key. The point system designated in parentheses is intended to be a guideline and should be adapted to meet the needs of each teaching-learning process. The point total is 200.)

1. (20 points)

   a. 9

   b. 4

   c. 10

   d. 2

   e. 7

   f. 1

   g. 8

   h. 5

   i. 6

   j. 3

2. (7 points)

   Any seven of the following:

   a. What is eaten is not important as long as hunger needs are satisfied

   b. Time is not taken to plan, prepare, or select foods to supply nutritionally balanced daily intake

   c. Nutritionally balanced meals are not provided by others

   d. Overly conscious of weight

   e. Exposed to misleading advertising

   f. Not informed about nutrition

   g. Do not understand importance of good nutrition

   h. Poor eating habits have been established

   i. Money and/or food not available

j. Unstable emotional state

k. Drugs, alcohol, and/or tobacco are used

3. (8 points)

a. Pregnancy and lactation

Any two of the following:

1) Well-balanced diet

2) Increased allowances for almost all essential nutrients at beginning of fourth month

3) Increased protein, calcium, and iron

4) Small calorie intake increase

b. Childhood

Any two of the following:

1) Enough calories for continuous weight gain

2) Well-balanced diet

3) High protein, vitamin, and mineral intake to promote growth and development

c. Teenage

1) Well-balanced diet

2) Increased calories during adolescent growth spurt

d. Adulthood

1) Well-balanced diet

2) Decreased calorie intake

4. (24 points)

a. 4

b. 1

c. 6

d. 3

e. 5

f. 8

g. 2

h. 7

i. 11

j. 9

k. 12

l. 10

5. (6 points)

   a. Weight gain

   b. High fat foods; high calorie foods with little nutritional value

   c. Lean muscle meats; skim milk, margarine made with unsaturated fats; liquid vegetable oil

   d. Prevent or aid in correcting kidney diseases or cardiovascular disorders

   e. Aid in correcting nausea, ulcers, or colitis

   f. Normal diet with high-iron foods; liver and organ meats; red meats; all dried fruits; soybeans; molasses

6. (10 points)

   a. 4

   b. 2

   c. 5

   d. 3

   e. 1

7. (8 points)

   a. 3

   b. 2

   c. 4

   d. 1

8. (22 points)

   a, b, d, e, g, h, k

9. Evaluated to the satisfaction of the instructor (10 points)
10. Evaluated to the satisfaction of the instructor (25 points)
11. Evaluated to the satisfaction of the instructor (30 points)
12. Evaluated to the satisfaction of the instructor (30 points)

FOOD PLANNING
UNIT I

UNIT OBJECTIVE

After completion of this unit, the student should be able to plan for food purchasing. This knowledge will be evidenced by completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with food planning to the correct definitions.
2. State the purpose of food planning.
3. Select from a list advantages of food planning.
4. Arrange in order steps in food planning, purchasing, and preparation.
5. State factors that affect food planning.
6. Select from a list planning techniques for saving money.
7. Select from a list planning techniques for saving time.
8. Arrange in order steps in preparing a grocery shopping list.
9. Plan menus for specific situations.
10. Substitute foods in menus to reduce costs.
11. Categorize food list for grocery shopping.
12. Make a grocery shopping list for planned menus.

FOOD PLANNING
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Order films, filmstrips, or other materials planned to supplement units.

   B. Provide students with objective sheet.

   C. Provide students with information and assignment sheets.

   (NOTE: The assignment sheets in this unit are intended to be personalized and localized in order to meet student needs dictated by a wide variety of meal planning situations. Feel free to duplicate the assignment sheets for multiple use.)

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheets.

   F. Adapt materials for use with special needs students.

   G. Evaluate students' knowledge to determine if they have achieved competencies established in Foods and Nutrition units in *Home Economics I: Basic Core Curriculum* and *Home Economics II: Basic Core Curriculum* before beginning this unit.

   H. Invite food purchasing agent from school cafeteria, hospital, or restaurant to share forms and ideas for taking inventory and food planning.

   I. Compile a price list of grocery items to assist students in completing assignment sheets. A *Food Price List Sheet* may also be purchased from the O.S.U. Student Union Bookstore, Oklahoma State University, Stillwater, Oklahoma 74074.

   J. Divide class into teams. Have each team plan menus for one day. Allow teams to trade menus. Have each team evaluate menus for form, completeness, ability to meet nutritional needs, and ability to provide attractiveness, variety, and eye appeal. Use *Standards of Quality Handbook for Clothing, Foods, and Home Furnishings* to assist in product evaluation. This 1979 publication is available upon request from Home Economics Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma 74074.

   K. Divide class into two teams to analyze the advantages of shopping with an organized grocery shopping list. Have each team plan menus for one day. Allow both teams to write out a shopping list for menu items. Designate one person from each team to be the "shopper." Appoint an official time keeper. Visit the grocery store. Allow Team 1 shopper to take the shopping list along to the supermarket. Team 2 shopper will only take the menu. Both shoppers will be timed as they "purchase" needed items. Five seconds of time will be added to the team's score for any incorrect or eliminated items. The team with the least amount of time will be declared the winner.

L. Collect ideas for low-cost recipes from magazines and newspapers. Allow students to use them in completing Assignment Sheet #2.

M. Provide each student with a restaurant menu. Have students select a meal, calculate costs of meal selected and figure tip. Have students calculate cost of preparing and eating this meal at home. Next, list foods that should be eaten at other meals during the day for adequate nutrition.

N. Invite a resource person to explain how the food stamp system works. Have students plan a week's menu on a food stamp budget. For further information contact the Department of Human Services: Food and Nutrition Service Unit, P.O. Box 25352, Oklahoma City, Oklahoma 73125.

O. Encourage students to consider use of convection oven, microwave oven, and small appliances when planning menus in Assignment Sheet #1.

P. Allow students to complete assignment sheets as home experiences.

Q. Give test.

R. Reteach, if necessary.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Assignment sheets

1. Assignment Sheet #1--Plan Menus for Specific Situations
2. Assignment Sheet #2--Substitute Foods in Menus to Reduce Costs
3. Assignment Sheet #3--Categorize Food List for Grocery Shopping
4. Assignment Sheet #4--Make a Grocery Shopping List for Planned Menus

D. Answers to assignment sheet

E. Test

F. Answers to test

III. Unit references:

A. Carson, Byrta; Ramee, Marue Carson; Cobe, Patricia; Stein, Jane. *How You Plan and Prepare Meals.* New York: McGraw-Hill Book Co., 1980.

B. Sherwin, Sally. *Seven Steps to Rock-Bottom Food Costs.* New York: William Morrow and Co., Inc., 1976.

C. Peck, Leilani Brinkley, et al. *Focus on Food*. New York: McGraw-Hill Book Co., 1974.

D. Cote, Patricia. *People, Food, and Science*. Lexington, Massachusetts: Ginn and Co., 1977.

E. Cross, Aleene. *Enjoying Family Living*. New York: J.B. Lippincott Co., 1973.

F. Medved, Eva. *The World of Food*. Lexington, Massachusetts: Ginn and Co., 1977.

G. Largen, Velda L. *Guide to Good Food*. South Holland, Illinois: The Goodheart-Willcox Co., Inc., 1979.

IV. Films:

A. *All American Meal*. 11 minute color film. Pasadena, California: Barr Productions, 1974.

B. *Consumer and the Supermarket*. 15-minute color film. Pasadena, California: Barr Productions, 1976.

(NOTE: These films are available for purchase from Barr Productions, 3490 East Foothill Boulevard, Pasadena, California 91107. They are also available on a free-loan basis to Oklahoma teachers *only* from the Oklahoma State Department of Vocational and Technical Education, 1515 West Sixth Street, Stillwater, Oklahoma 74074. Out-of-state teachers must order from address listed.)

V. Filmstrips:

A. *Meal Planning Series*. Color filmstrip, cassettes, and teacher's guides. Four individual programs in series. Altoona, Pennsylvania: Butterick Publishing Co., 1978.

(NOTE: Available for purchase from Butterick Publishing Co., P.O. Box 1914, Altoona, Pennsylvania 16603.)

B. *Planning to Eat?: A Guide to Saving Time, Money, and Energy*. One color filmstrip, cassette, and teacher's guide. Orlando, Florida: Tupperware Educational Services, n.d.

(NOTE: Available for purchase from Tupperware Home Parties, Educational Services Division, P.O. Box 2353, Orlando, Florida 32802.)

C. *Guide to Meal Planning*. Betty Crocker filmstrip teaching kit. Minneapolis, Minnesota: General Mills, Inc., n.d.

(NOTE: Available for purchase from General Mills, Inc., P.O. Box 1113, Minneapolis, Minnesota 55440.)

D. *Microwave Cooking*. Betty Crocker filmstrip teaching kit. Minneapolis, Minnesota: General Mills, Inc., n.d.

(NOTE: Available for purchase from General Mills, Inc., P.O. Box 1113, Minneapolis, Minnesota 55440.)

FOOD PLANNING
UNIT I

INFORMATION SHEET

I. Terms and definitions

   A. Consumer--Person who uses goods and/or services

   B. In-season--Fresh fruit, vegetable, or other food usually purchased at lower cost during peak harvest

   C. Empty calories--Foods that supply few nutrients in proportion to calories

   D. Impulse buying--Purchases made on the spot without prior planning

II. Purpose of food planning--To purchase food wisely using available money, time, and energy (Assignment Sheet #1)

III. Advantages of food planning

   A. Helps consumer stay within food budget

   B. Provides a plan to make sure that nutritional needs are met

   C. Allows time to use resource materials in planning foods

   Examples: Cookbooks, magazines, newspapers, advertisements

   D. Promotes variety in meals

   E. Reduces number of trips to grocery store

   F. Eliminates rush to decide what to serve for meals

   G. Provides opportunity to take advantage of advertised "specials"

IV. Steps in food planning, purchasing, and preparation

   A. Determine amount of money available to spend on food

   (NOTE: In 1969, Americans spent almost 22 percent of their net income for food purchases. This figure includes meals eaten at home, money spent eating out and entertaining others, packed lunches, and money spent on snacks.)

   B. Plan menus for the week or month

   (NOTE: By planning in advance, you can save time, energy, and money and can serve nutritious, flavorful, attractive meals. Be sure to consider advertisements for food specials as you are planning.)

INFORMATION SHEET

C. Make a grocery shopping list

(NOTE: Check the recipes to be used in the week's or month's menus and inventory on-hand supplies to make the grocery shopping list.)

D. Shop for groceries

(NOTE: Follow the shopping list so that you will be sure to purchase the necessary items. Avoid impulse buying.)

E. Store food upon return from the grocery store

F. Complete a time-work plan for food preparation, service, and clean-up

V. Factors that affect food planning

A. Money available for food

B. Time available for planning, shopping, and preparing

C. Facilities and equipment available

D. Number of people eating

E. Nutritional needs

(NOTE: Nutritional needs will vary depending on the ages and health of those eating meals. Changes may need to be made during planning and purchasing for special diets.)

F. Availability of home-grown or home-preserved foods

G. Availability of shopping facilities

(NOTE: You will plan differently if you shop once a month in a discount store in a town far away than you will if you are able to shop weekly.)

H. Climate or season

I. Likes and dislikes of persons eating

VI. Planning techniques for saving money (Assignment Sheet #2)

A. Plan menus and recipes for the week or month

B. Purchase and prepare foods in quantities

C. Substitute lower-cost foods when possible when planning menus

D. Plan to use in-season foods

E. Use meat substitutes and low-cost foods in menus

INFORMATION SHEET

F. Plan to use dried milk instead of fresh milk

G. Watch for "specials" in grocery store advertisements

(NOTE: Try to use these specials as you plan meals and make grocery shopping list.)

H. Use cents-off coupons or rebate offers

I. Make a shopping list from planned menus and recipes

J. Compare unit prices

VII. Planning techniques for saving time

(NOTE: Decisions will often need to be made. It will not always be possible to save both time and money.)

A. Plan menus around easy-to-prepare foods

Examples: Instant dehydrated potatoes, canned and frozen vegetables, prepared mixes, ready-to-eat and quick cereals

B. Plan for use of foods prepared and stored in quantity

Example: Stew that is prepared in a large quantity can be frozen for later use

C. Plan no more than one trip to the grocery store per week

(NOTE: When possible plan for even fewer trips.)

D. Purchase all foods from one store

(NOTE: This eliminates wasted time and energy.)

E. Use prepared grocery list when shopping

(NOTE: This list helps to organize shopping trip through the store, which saves time.)

VIII. Steps in preparing a grocery shopping list (Assignment Sheets #3 and #4)

A. Keep paper and pencil in kitchen to make list as items are needed

(NOTE: This discourages impulse buying and saves time and trips to the grocery store.)

B. Gather food advertisements for weekly specials

(NOTE: Evaluate these sale items for possible menu suggestions.)

INFORMATION SHEET

C. List foods needed for planned menus

D. Check current food supply and cross these items off of list

E. Decide where shopping will be done

F. Organize grocery list according to order that foods will be found in grocery store

FOOD PLANNING
UNIT I

ASSIGNMENT SHEET #1--PLAN MENUS FOR SPECIFIC SITUATIONS

NAME________________________ SCORE____________

Planning menus is an important step in planning and preparing any meal. Although it sometimes may seem to be a waste of time, there are many advantages offered by planning menus.

**Helps you stay within your food budget

**Provides a plan to see that nutritional needs are met

**Helps promote variety in meals and foods eaten

**Can help reduce number of trips to grocery store

**Eliminates rush to decide "what to serve" for meals

By planning meals in advance, you can save time, energy, and money, *plus* serve nutritious, flavorful, and attractive meals.

Plan menus for each of the following situations. In each of the situations, the dollars available for food budget are not given. Use your imagination to determine the size, age, and activities of people who will eat the meal. You can plan according to your own food preferences and preparation experiences.

ASSIGNMENT SHEET #1

SITUATION 1--ADVERTISED SPECIAL AT GROCERY STORE

You are one of three roommates sharing an apartment. Each of you has a full-time job. It is your month to plan and prepare the evening meal for the three of you. One of the grocery stores is running a special on pork chops packed in lots of 12. The evening meal is normally served about 6:30 p.m., approximately one hour after you leave work. What menu(s) would you plan around the pork chops? How many pork chops would be served during one meal? If there are pork chops remaining how would you plan for their use?

ASSIGNMENT SHEET #1

SITUATION 2

NO TIME TO COOK

You are the oldest of four children. Both of your parents work and don't get home until almost dinnertime. It is your responsibility to come home from school and prepare dinner on weeknights. Your father sets the table, the younger children help with cleanup, and your mother does the grocery shopping on Saturday.

You have made the basketball team! You will have to stay after school for two hours each day for the next three months. You are not sure how your family will manage dinner.

List a number of suggestions for dealing with the situation in the space provided below.

Examples: New job assignments, scheduling changes.

Plan a menu for a typical dinner in the situation above. List the steps for preparing the dinner and who would do each step.

ASSIGNMENT SHEET #1

SITUATION 3--CLASS FUND-RAISING PROJECT

Your class is going to prepare and serve a meal for a fund-raising project. This meal will be served before the homecoming basketball game. The food preparation facilities that you will be able to use will be available at 1:30 p.m. on the day of the game. You want to be ready to begin serving at 5:15 p.m. Although class members will form committees to purchase, prepare, serve, and clean up, you were elected co-chairperson. What is a menu that will be manageable for you and your classmates to serve and prepare (and make a profit)?

ASSIGNMENT SHEET #1

SITUATION 4--MICROWAVE OVEN PURCHASED

You are the proud owner of a new microwave oven. Now what? It is your responsibility to plan and prepare the evening meal for you, your brother, sister, and mother. What are some ways that you think this new purchase will assist you?

Plan a menu for a dinner that you can prepare to serve within one hour. Plan to use the microwave oven as much as possible. List the steps for preparing this menu.

How much time will you save by using the microwave oven?

ASSIGNMENT SHEET #1

SITUATION 5

Plan meals and menus for a situation that affects you personally. Describe the situation and resources that are available in order to plan and prepare nutritious meals.

Situation:

Menus planned:

Resources used:

FN - 17-C

FOOD PLANNING
UNIT I

ASSIGNMENT SHEET #2--SUBSTITUTE FOODS IN MENUS TO REDUCE COSTS

NAME________________________________ SCORE______________

PART I

It is possible to change planned menus without lowering nutritional value. Write a shopping list for these menus. Visit a grocery store or use advertisements or price listings and price each item on your list. Total prices at the end of the column.

MENUS	GROCERY SHOPPING LIST	PRICE PER ITEM
Breakfast Orange Juice Bacon Scrambled Eggs Buttered Toast Milk		
Lunch Fried Chicken Seasoned Green Beans Potato Salad Cloverleaf Rolls Ice Cream Iced Tea		
Dinner Spinach Salad Baked Ham Glazed Sweet Potatoes with Almonds Broccoli with Cheese Sauce Apple Pie Iced Tea		
	TOTAL	

ASSIGNMENT SHEET #2

PART II

Using a price list, advertisements, food price list, or trip to the grocery store, evaluate the menus listed in Part I. Recommend changes that could be made to cut food expenses by 10 percent without lowering nutritional value.

Menus	
Breakfast	
Lunch	
Dinner	

FOOD PLANNING
UNIT I

ASSIGNMENT SHEET #3--CATEGORIZE FOOD LIST FOR GROCERY SHOPPING

NAME______________________________________ SCORE______________

Grocery shopping lists are made after menus are planned and advertisements for food specials considered. They are organized according to the grocery store floor plan. Items located just inside the door as you enter are placed at the top of the shopping list and picked up first. Frozen foods are picked up last to prevent thawing.

Using a grocery shopping list can save time, energy, and money and can keep you from forgetting or omitting items.

PART I

Use the following food list and write the foods listed in the correct places they will be found in the grocery store.

FOOD LIST

T-bone steak
lettuce
ice cream
hot dogs
canned tuna
eggs
canned green beans
T.V. dinner
rye bread
fresh carrots
Angel food cake
pork chops
frozen pizza
canned peaches
flour

hot dog buns
American cheese
fresh tomatoes
milk
salt
frozen strawberries
bacon
sugar
doughnuts
apples
popsicles
butter
brown sugar
apple pie
potatoes

20-C

ASSIGNMENT SHEET #3

FOOD CATEGORIES	
FRESH PRODUCE	
MEAT	
CANNED PRODUCTS	
STAPLES	
DAIRY CASE	
BREAD AND BAKED GOODS	
FROZEN FOODS	

ASSIGNMENT SHEET #3

PART II

Visualize the floor plan of a grocery store in your area. Make a grocery shopping list using the thirty food items listed in Part I. List the items on the grocery shopping list in the order that they would be found in the selected grocery store.

GROCERY SHOPPING LIST

Name of grocery store ______________________________

Location of grocery store ______________________________

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________
9. ______________________________
10. ______________________________
11. ______________________________
12. ______________________________
13. ______________________________
14. ______________________________
15. ______________________________
16. ______________________________
17. ______________________________
18. ______________________________
19. ______________________________
20. ______________________________
21. ______________________________

ASSIGNMENT SHEET #3

22. ______________________________
23. ______________________________
24. ______________________________
25. ______________________________
26. ______________________________
27. ______________________________
28. ______________________________
29. ______________________________
30. ______________________________

FOOD PLANNING
UNIT I

ASSIGNMENT SHEET #4--MAKE A GROCERY SHOPPING LIST FOR PLANNED MENUS

NAME____ SCORE____________

PART I

Meal/menu planning is becoming a complicated process as our society changes. Work patterns have shifted with 18 million people having more than one job, 9 out of 10 women in the work force, and at least half of our children going to day care or preschool centers. Lifestyles are changing! The average person eats one meal at home per day. Other meals are eaten at work, school, enroute, from a lunch box, or from a vending machine. What was once called *food planning* is now often called *food selection*.

Using available resources, menu writing skills, meal planning techniques, and nutritional knowledge, plan menus for one week for the family described in the following situation.

Jim and Becky are a newly married couple. Jim is 23 and Becky is 21. They are both employed from 8:00 to 5:00 at jobs in the city. They commute 30 minues to work and 30 minutes from work each day. Since neither of them enjoy nor can afford eating out every day for lunch, Becky and Jim pack their lunches at least 3 days a week. They have set aside $50.00 per week for their food budget.

Use form on the next page to plan menus for the week. Then use the next form to make your shopping list for those meals planned.

ASSIGNMENT SHEET #4

WEEKLY MENUS			
	Breakfast	**Lunch**	**Dinner**
MONDAY			
TUESDAY			
WEDNESDAY			
THURSDAY			
FRIDAY			
SATURDAY			
SUNDAY			

ASSIGNMENT SHEET #4

PART II

Make a grocery shopping list for the menus planned and the grocery store at which you will shop. Use this list to price each item. Total the amount of money to be spent on food for the planned menus and compare it to the amount of money set aside for Jim and Becky's food budget.

FOOD CATEGORIES	SHOPPING LIST	PRICE PER ITEM	TOTAL PRICE OF ITEMS
Fresh Produce:			
Meat:			
Canned Products:			
Staples:			
Dairy Case:			
Bread and Baked Goods:			
Frozen Foods:			

Subtotal: ____________________

Money Spent for Meals Eaten Out: ____________________

Other Food Costs: ____________________

TOTAL: ____________________

FOOD PLANNING
UNIT I

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #3

The foods should be listed under the following categories. Answers may vary according to grocery store selected.

Fresh produce

Lettuce

Fresh carrots

Fresh tomatoes

Apples

Potatoes

Canned products

Canned green beans

Canned peaches

Canned tuna

Dairy Case

Milk

Eggs

American cheese

Butter

Frozen foods

Ice cream

Frozen pizza

Frozen strawberries

T. V. dinner

Popsicles

Meat

T-bone steak

Bacon

Pork chops

Hot dogs

Staples

Flour

Sugar

Salt

Brown sugar

Bread and baked goods

Hot dog buns

Rye bread

Doughnuts

Apple pie

Angel food cake

FN - 29-C

FOOD PLANNING
UNIT I

TEST

NAME____ SCORE______________

1. Match terms associated with food planning to the correct definitions. Place the correct numbers in the blanks provided.

______a. Foods that supply few nutrients in proportion to calories

______b. Person who uses goods and/or services

______c. Purchases made on the spot without prior planning

______d. Fresh fruit, vegetable, or other food usually purchased at lower cost during peak harvest

1. Consumer
2. In-season
3. Empty calories
4. Impulse buying

2. State the purpose of food planning.

____

____

____

3. Select from the following list advantages of food planning. Mark each correct answer with an "X."

______a. Helps consumer stay within food budget

______b. Provides opportunity to take advantage of advertised "specials"

______c. Provides empty calories

______d. Promotes variety in meals

______e. Reduces number of trips to grocery store

______f. Makes it easier to rush to decide what to serve for meals

4. Arrange in order steps in food planning, purchasing, and preparation. Place a "1" before the first step, a "2" before the second step, and so on in the blanks provided.

______a. Shop for groceries

______b. Plan menus for the week or month _____c. Determine amount of money available to spend on food

_____d. Store food upon return from the grocery store

_____e. Make a grocery shopping list

_____f. Complete a time-work plan for food preparation, service, and clean-up

5. State five factors that affect food planning.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

6. Select from the following list planning techniques for saving money. Mark each correct answer with an "X."

_____a. Do not use cents-off coupons

_____b. Plan menus and recipes for the week or month

_____c. Shop a variety of specialty stores or delicatessens

_____d. Purchase and prepare foods in quantities

_____e. Avoid "specials" in grocery store advertisements

_____f. Use meat substitutes and low-cost foods in menus

_____g. Substitute lower-cost foods when possible when planning menus

_____h. Compare unit prices

7. Select from the following list planning techniques for saving time. Mark each correct answer with an "X."

_____a. Plan menus around easy-to-prepare foods

_____b. Plan for use of foods prepared and stored in quantity

_____c. Plan several trips to the grocery store per week

_____d. Use prepared grocery list when shopping

8. Arrange in order the steps in preparing a grocery shopping list. Place a "1" in front of the first step, a "2" in front of the second step, and so on in the blanks provided.

_____a. List foods needed for planned menus

_____b. Organize grocery list according to order that foods will be found in grocery store _____c. Gather food advertisements for weekly specials

_____d. Decide where shopping will be done

_____e. Check current food supply and cross these items off of list

_____f. Keep paper and pencil in kitchen to make list as items are needed

9. Plan menus for specific situations.

10. Substitute foods in menus to reduce costs.

11. Categorize food list for grocery shopping.

12. Make a grocery shopping list for planned menus.

(NOTE: If activities 9-12 have not been finished before the test, ask your instructor when they should be completed.)

FOOD PLANNING
UNIT I

ANSWERS TO TEST

(NOTE: It may be helpful to use your blank test to make a test key. The point system in parentheses is intended to be a guideline and should be adapted to meet the needs of each teaching-learning process. The point total is 150.)

1. (8 points)

   a. 3

   b. 1

   c. 4

   d. 2

2. (2 points)

   To purchase food wisely using available money, time, and energy

3. (12 points)

   a, b, d, e

4. (12 points)

   a. 4

   b. 2

   c. 1

   d. 5

   e. 3

   f. 6

5. (10 points)

   Any five of the following:

   a. Money available for food

   b. Time available for planning, shopping, and preparing

   c. Facilities and equipment available

   d. Number of people eating

   e. Nutritional needs

   f. Availability of home-grown or home-preserved foods

   g. Availability of shopping facilities

   h. Climate or season

   i. Likes and dislikes of persons eating

6. (16 points)

   b, d, f, g, h

7. (8 points)

   a, b, d

8. (12 points)

   a. 3

   b. 6

   c. 2

   d. 5

   e. 4

   f. 1

9. Evaluated to the satisfaction of the instructor (20 points)

10. Evaluated to the satisfaction of the instructor (20 points)

11. Evaluated to the satisfaction of the instructor (10 points)

12. Evaluated to the satisfaction of the instructor (20 points)

FOOD PURCHASING
UNIT II

UNIT OBJECTIVE

After completion of this unit, the student should be able to use consumer food purchasing practices. This knowledge will be evidenced by completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with food purchasing to the correct definitions.
2. Select from a list factors to consider when selecting a grocery store.
3. State recommended times to shop at the grocery store.
4. Select from a list good food purchasing practices.
5. State grocery store marketing techniques.
6. Distinguish between required and optional information found on food labels.
7. Compare grocery store prices.
8. Evaluate grocery store sale items.
9. Determine label information.
10. Compare grocery stores.
11. Compare brand prices.
12. Calculate unit prices.
13. Adapt menus for specific situations.

FOOD PURCHASING
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Gather films, filmstrips, and other materials needed to supplement unit.

   B. Provide students with objective sheet.

   C. Provide students with information and assignment sheets.

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheets.

   F. Adapt materials for special needs students.

   G. Introduce unit with filmstrip kit, "Food: A Super Natural Resource." A value clarification approach to nutrition and consumer education. This teaching kit is available from the Milk Foundation, 150 N. Wacker Drive, Suite 1234, Chicago, Illinois 60606.

   H. Allow students to research the universal product code. Assist students in considering job training needed, system cost, and consumer effects, as well as speed and accuracy of the system.

      (NOTE: Resource material is available through Operation Aware, The Great Atlantic and Pacific Tea Company, Inc., 2 Paragon Drive, Montvale, New Jersey 07645.)

   I. Encourage students to keep family grocery and restaurant receipts for one month for a home experience. Have students deduct non-food items, total receipts, and divide total by the number of people and meals served at home to estimate an average cost per person per meal. Have students make recommendations for ways to lower this average meal cost.

   J. Assist students to interpret three kinds of federal food standards which protect consumers.

      1. Standards of identity under which recipes are on file.

      2. Standards of quality.

      3. Standards of container fill which ensure that consumers will not be deceived by package size.

   K. Have students collect weekly grocery advertisements and compare prices of listed items from week to week.

L. Have students bring to class a food advertisement that appeals to them. The ad could be a tape-recorded radio or television ad or one from a newspaper, magazine, label, food package, or grocery store poster. Allow students to explain to others why this ad is appealing.

Examples: The ad might be described as informative, colorful, or misleading

M. Allow students to construct an "ideal" ad that contains information desired and to present this ad to classmates for their evaluation.

N. Have students compute possible savings on buying in quantity.

O. Assist students in comparing labels, contents, prices, number of servings and quality of several different canned products.

P. Invite resource person to discuss consumer purchasing and how to get the most for your money in the food store.

Q. Invite resource person to discuss grocery store marketing techniques to assist students with objective #5.

R. Demonstrate the use of grocery store scales to weigh produce and other foods and products.

S. Encourage students to check grocery store receipts for accuracy.

T. Encourage students to shop with a calculator.

U. Assist students in evaluating weekly food purchases according to the following recommended percentages:

Milk and dairy products	15 percent
Fruits and vegetables	22 percent
Meat and meat substitutes	35 percent
Breads and cereals	10 percent
Other foods	18 percent

V. Give test.

W. Reteach if necessary.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Assignment sheets

1. Assignment Sheet #1--Compare Grocery Store Prices
2. Assignment Sheet #2-Evaluate Grocery Store Sale Items

3. Assignment Sheet #3--Determine Label Information
4. Assignment Sheet #4--Compare Grocery Stores
5. Assignment Sheet #5--Compare Brand Prices
6. Assignment Sheet #6--Calculate Unit Prices
7. Assignment Sheet #7--Adapt Menus for Specific Situations

D. Answers to assignment sheets

E. Test

F. Answers to test

III. Unit references:

A. Sherwin, Sally. *Seven Steps to Rock-Bottom Food Costs.* New York: William Morrow and Co., Inc., 1976.

B. Cross, Jennifer. *The Supermarket Trap: The Consumer and the Food Industry.* Bloomington: Indiana University Press, 1976.

C. Largen, Velda L. *Guide to Good Food.* South Holland, Illinois: Goodheart-Willcox Co., Inc., 1979.

IV. Filmstrips

A. "Planning to Eat? A Guide to Saving Time, Money, and Energy." Available from Tupperware Home Parties, Educational Services, P.O. Box 2353, Orlando, Florida 32802.

B. "Meal Planning Series." Available from Butterick Publishing Company, P.O. Box 1914, Altoona, Pennsylvania 16603.

C. "Food: A Super Natural Resource." Available from the Milk Foundation, 150 N. Wacker Drive, Suite 1234, Chicago, Illinois 60606.

D. "Packaging." Betty Crocker Filmstrip Kit. General Mills, Inc., P.O. Box 1113, Minneapolis, Minnesota 55440.

V. Film--"Consumer and the Supermarket." Available from Barr Films, 3490 E. Foothill Blvd., Pasadena, California 91107.

(NOTE: This film is available on a free-loan basis to Oklahoma teachers *only* from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1515 West Sixth Avenue, Stillwater, Oklahoma 74074. Out-of-state teachers must order from the address above.)

FOOD PURCHASING
UNIT II

INFORMATION SHEET

I. Terms and definitions

A. Impulse buying--Purchases made on the spur of the moment without prior planning

B. Convenience food--Product that saves time by eliminating preparation steps

C. Generic label--Label containing essential information; no brand name is given

D. Grades--Classifications established by the U.S.D.A. to indicate quality of meat or produce

E. Open dating--System of placing a readable date on packages of perishable and semi-perishable products; usually represents the last date on which the product should be sold

F. Unit pricing--Method of determining price to assist in comparing similar products or various sizes of the same product

Example: Price per ounce or price per pound

G. Universal product code--Bar of lines used for computerized checkout and inventory that signifies product, manufacturer, size, price and other necessary information

Example:

0 51000 01251

H. Store brand--Foods that are produced or packaged for a chain store; often sold at a lower price than national brands

I. Comparison shopping--Choosing a product from several similar products by evaluating price and label information

J. Staples--Foods and supplies to always have on hand for a well-stocked kitchen

Examples: Flour, spices, sugar, shortening, leavening agents

INFORMATION SHEET

II. Factors to consider when selecting a grocery store (Assignment Sheets #1 - #4)

  A. Food costs

  (NOTE: Food costs tend to be higher in small neighborhood grocery and convenience stores, but these stores can save time, energy, and gasoline.)

  B. Location

  C. Services provided

  Examples: Delivery service, trading stamps, credit for food purchases, check cashing service, pharmacy service, bakery, delicatessen, greenhouse items

  (NOTE: It will be necessary to evaluate the costs of these services when selecting a grocery store.)

  D. Quality and variety of food selection

  E. Cleanliness of facility

  F. Attitude, friendliness, and service provided by personnel

  G. Essential stock of non-food items

  H. Convenient floor plan

  (NOTE: Food items are arranged in logical order.)

  I. Convenient store hours

III. Recommended times to shop at the grocery store

  A. Early in the day

  (NOTE: Produce and meat may be freshest early in the day. The store is also usually the least crowded at this time. Learn the habits of your local store.)

  B. When you are not hungry

  (NOTE: Shopping for groceries when hungry may result in impulse buying.)

  C. When you can shop alone

  (NOTE: Shopping with other people often results in impulse buying. It is difficult to compare prices and perform other good consumer practices with others around.)

  D. When you are not too tired or rushed

INFORMATION SHEET

IV. Good food purchasing practices (Assignment Sheets #5, #6, and #7)

A. Make and use a grocery shopping list

(NOTE: It will be necessary to be flexible enough to take advantage of sale items, to substitute for items that the store may be out of, or purchase items that may be more expensive or of different quality than planned.)

B. Compare prices of different brands

(NOTE: Most often, the store brand will be sold for a few cents less than national brands.)

C. Compare prices of convenience foods and home-prepared foods

(NOTE: The more processing done to a food, the more expensive it may be.)

D. Resist impulse buying

E. Read and evaluate labels on food containers

(NOTE: This practice ensures that the consumer knows what is in the container and is aware of what is being purchased.)

F. Evaluate cost of non-food items before purchasing

(NOTE: These items can often be purchased at a lower price at a store other than a grocery store.)

G. Shop for groceries on a weekly or monthly basis

(NOTE: This practice saves time, energy, and money.)

H. Evaluate and select a grocery store that best meets your needs at the most economical price

I. Evaluate true costs of packaging

(NOTE: Foods in plain packages are usually less expensive than foods in large, bright, colorful packages.)

J. Evaluate food specials or sales

(NOTE: Sometimes advertised "specials" are not actually less expensive than other items.)

K. Calculate unit prices to compare prices of similar foods

(NOTE: Use calculator when shopping.)

INFORMATION SHEET

L. Do not exceed food budget

M. Purchase foods in quantity when less expensive

Example: Purchase 3 cans for $1.00 rather than 34¢ per can

N. Purchase foods in season

(NOTE: These foods are usually less expensive at this time.)

O. Listen and watch at the check-out counter to make sure charges are made correctly

P. Become aware of marketing techniques used by grocery store

Example: More expensive items are placed at eye level

Q. Redeem coupons on items purchased

R. Calculate costs of shopping at a store which provides special services

Examples: Delivery service, trading stamps, credit for food purchases

S. Compare and evaluate foods for nutritional value

T. Calculate cost per serving of foods being purchased

U. Interpret open dating system used on perishable products

(NOTE: The ability to interpret this dating system will ensure that products purchased will be fresh.)

V. Substitute lower-cost foods when possible

Examples: Substitute stew meat for roast and in-season produce for out-of-season produce

W. Search food advertisements in media when planning menus and making grocery shopping lists

(NOTE: This allows you to take advantage of and plan for using sale items.)

X. Buy perishable foods in correct amounts for intended use

(NOTE: If these items spoil or loose quality before being used, money will be wasted.)

Y. Use grocery store scales to weigh produce and check weight of packaged products

Z. Avoid sampling products

(NOTE: This cost is passed on to the consumer.)

INFORMATION SHEET

AA. Return items that you decide *not* to purchase to original place

BB. Carefully check condition of containers and packages before purchasing

CC. Avoid buying expensive, empty-calorie foods

Examples: Potato chips, candy, soft drinks

V. Grocery store marketing techniques

(NOTE: These are some of the techniques grocery stores use to influence food purchasing.)

A. Placement of items on shelves

Examples: Expensive and new items conveniently placed at eye level, cereal and toys placed on lower shelves to provide easy access by children, staple items placed on lower and upper shelves to force consumers to look through other items

B. Carefully arranged floor plan

Examples: Large, bulk items placed around edges of store to promote filling shopping cart quickly and making return trip to store; items purchased frequently (meat, bread, milk) placed in areas that will force consumer to walk around store to locate; displays placed at ends of aisles to provide more exposure

C. Use of lighting

Examples: Bright and dim lights arranged to assist traffic flow; colored lights used to enhance appearance of food such as meat and bakery items

D. Use of colors

Examples: Attract attention; make food and packaging more appealing

E. Size of shopping cart

Example: Small shopping carts are provided to promote return visit by customer

(NOTE: Most shoppers will not rearrange or obtain an additional shopping cart.)

F. Use of music

(NOTE: This relaxes consumer and relieves stress of shopping.)

INFORMATION SHEET

G. Special services

(NOTE: These are methods of attracting customers to shop at a particular store.)

Examples: Advertised specials, trading stamps, games and contests, home delivery, check cashing service, premiums such as china or cookbooks, express line

VI. Information found on food labels (Assignment Sheet #3)

(NOTE: It is necessary to read, study, and compare information on food labels to make sure you know what you are buying and to obtain the most for your food dollar. All packaged food must be wholesome and packed in a clean plant under sanitary conditions. The Food, Drug, and Cosmetic Law requires that every package must clearly display certain information on its label. However, labels often provide information in addition to these requirements.)

A. Required information

(NOTE: For products that have a standard of identity established, information on five and six is not necessary.)

1. Legal name of product
2. Name and address of manufacturer, packer, or distributor
3. Net weight of contents
4. Statements of properties if special dietary uses are recommended
5. Statements of any artificial coloring, flavoring, or chemical preservatives
6. Statement of ingredients listed by common names in descending order of volume
7. Information concerning variety, style of pack, and presence of packing medium on canned fruits and vegetables
8. Statement of reason, if a product is below basic standard of quality or below standards of fill, as set by Food and Drug Administration

B. Optional information

1. Brand name and other identification
2. Picture of product
3. Details about quantity

   Examples: Number of pieces or cups

INFORMATION SHEET

4. Directions for use

   Examples: Recipes; cooking and/or serving information

5. Inspection mark

6. Percentage of U.S. Recommended Dietary Allowances (R.D.A.) per serving

7. Number and size of servings per container

8. Date packaged or date beyond which product should not be sold

9. Universal product code

   (NOTE: This is used for computerized checkout and inventory.)

10. Suggestions for handling and storing

FOOD PURCHASING
UNIT II

ASSIGNMENT SHEET #1--COMPARE GROCERY STORE PRICES

NAME ________________________ SCORE ______________

The consumer is constantly being exposed to many products at the marketplace. Over 8,000 items are stocked in large grocery stores. Two-thirds of these products were not even seen before World War II, and an average of 5,000 new products appear each year.

There are three types of grocery stores that provide food products and other services for consumers: major chain grocery stores, independently owned and operated grocery stores, and convenience stores. It is important for the consumer to compare prices among these stores to obtain the most for the dollar in the marketplace.

PART I

Use the following product list to complete the chart comparing prices among three stores in your area. Use this information to answer the questions that follow.

(NOTE: Be sure to compare prices of similar brands, qualities, and quantities.)

PRODUCT	PRICE: STORE #1	PRICE: STORE #2	PRICE: STORE #3	STORE # WITH LOWEST PRICE	STORE # WITH HIGHEST PRICE
Milk, whole fresh, 1/2 gal.					
Margarine 1 lb. pkg.					
Ground beef 1 lb.					
Round steak 1 lb.					
Peaches, 1 lb. can of sliced					
Hand soap 7 oz.					
Lettuce 1 head					
Hot dogs 12 oz. pkg.					

ASSIGNMENT SHEET #1

PRODUCT	PRICE: STORE #1	PRICE: STORE #2	PRICE: STORE #3	STORE # WITH LOWEST PRICE	STORE # WITH HIGHEST PRICE
Eggs, 1 dozen med. size					
Orange juice, frozen, 6 oz.					
Chicken, cut up fryer, per pound					
Chicken, whole fryer, per pound					
Flour, 5 lb., all-purpose					
Green beans, French style, 16 oz. can					
Peanut butter 18 oz. jar					
Coffee, 1 lb. electric perc					
Waxed paper 25 sq. feet					

PART II

1. Look at your chart and count the number of times each store is listed in the last two columns.

Lowest Prices	Highest Prices
Store #1______________	Store #1______________
Store #2______________	Store #2______________
Store #3______________	Store #3______________

ASSIGNMENT SHEET #1

2. Which store had the most low prices?________________________________

3. Which store had the most high prices?_______________________________

4. Which store would you select to shop at?______________________________

5. Why would you make this decision?__________________________________

FOOD PURCHASING
UNIT II

ASSIGNMENT SHEET #2–EVALUATE GROCERY STORE SALE ITEMS

NAME____________________________________ SCORE________________

Grocery store sales are often held on items that are present in large quantities or on leader items that are used to attract customers. Sales are also held on seasonal items that the grocery store wants to delete from their stock.

Planning ahead to use these sale items in menus can save the consumer money if the item is truly on sale at a reduced price. The consumer must BEWARE of items listed "on sale," since occasionally, items on "sale" will actually cost more than similar items of higher quality or those items not on sale.

Visit a local grocery store or use newspaper ads or other resources to determine what items are on sale this week. Complete the following assignment evaluating grocery store sales. Calculate the amount of money saved or lost on each sale item.

Items on Sale	Sale Price	Regular Price	Money Saved or Money Lost	

FOOD PURCHASING
UNIT II

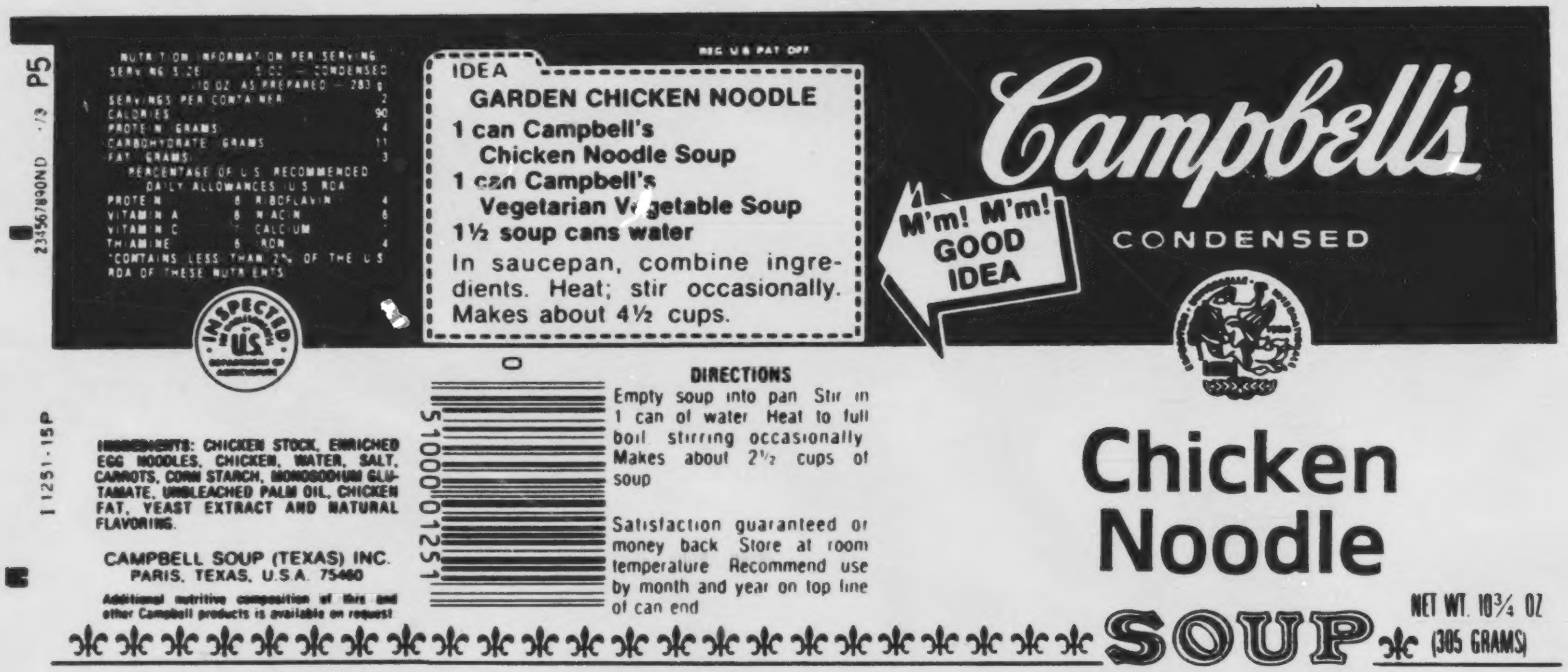
ASSIGNMENT SHEET #3--DETERMINE LABEL INFORMATION

NAME______________________________________ SCORE________________

Labeling is provided for the consumer to provide nutritional, serving, general, and cost information about products. Consumers should read and evaluate information found on labels before selecting and purchasing products.

Use the label on the next page to answer the questions that follow.

ASSIGNMENT SHEET #3



P5
23456789OND ·13

NUTRITION INFORMATION PER SERVING

SERVING SIZE	5 OZ — CONDENSED 10 OZ AS PREPARED — 283 g
SERVINGS PER CONTAINER	2
CALORIES	90
PROTEIN (GRAMS)	4
CARBOHYDRATE (GRAMS)	11
FAT (GRAMS)	3

PERCENTAGE OF U.S. RECOMMENDED DAILY ALLOWANCES (U.S. RDA)

PROTEIN	6	RIBOFLAVIN	4
VITAMIN A	8	NIACIN	6
VITAMIN C	*	CALCIUM	*
THIAMINE	6	IRON	4

*CONTAINS LESS THAN 2% OF THE U.S. RDA OF THESE NUTRIENTS

INSPECTED U.S.

REG. U.S. PAT. OFF.

IDEA

GARDEN CHICKEN NOODLE

1 can Campbell's Chicken Noodle Soup
1 can Campbell's Vegetarian Vegetable Soup
1½ soup cans water

In saucepan, combine ingredients. Heat; stir occasionally. Makes about 4½ cups.

M'm! M'm! GOOD IDEA

Campbell's

CONDENSED

Chicken Noodle

SOUP

NET WT. 10¾ OZ (305 GRAMS)

I 1251-15P

INGREDIENTS: CHICKEN STOCK, ENRICHED EGG NOODLES, CHICKEN, WATER, SALT, CARROTS, CORN STARCH, MONOSODIUM GLUTAMATE, UNBLEACHED PALM OIL, CHICKEN FAT, YEAST EXTRACT AND NATURAL FLAVORING.

CAMPBELL SOUP (TEXAS) INC.
PARIS, TEXAS, U.S.A. 75460

Additional nutritive composition of this and other Campbell products is available on request

0
51000 01251

DIRECTIONS

Empty soup into pan. Stir in 1 can of water. Heat to full boil, stirring occasionally. Makes about 2½ cups of soup.

Satisfaction guaranteed or money back. Store at room temperature. Recommend use by month and year on top line of can end.

Used with permission of Campbell Soup, Inc.

FN - 57-C

ASSIGNMENT SHEET #3

1. What is the legal name of the product?

2. What is the name and address of the manufacturer, packer, or distributor?

3. What is the net weight of the contents?

4. What ingredients are in the product?

5. What one ingredient is present in the largest quantity in this product?

6. What is the brand name?

7. What variety is this product?

8. What packing medium was used with this product?

9. How many servings are in this container?

10. For what nutrients is the percentage of RDA given?

11. What numbers on this product represent the universal product code?

12. How many calories does this product contain per serving?

13. How many grams of the following does this product provide?

    Protein--

    Carbohydrates--

    Fat--

FOOD PURCHASING
UNIT II

ASSIGNMENT SHEET #4--COMPARE GROCERY STORES

NAME ______________________________ SCORE ______________

Most communities have more than one grocery store. It is to the consumer's advantage to evaluate and compare grocery stores to assist in the selection of the store that will provide the best quality and service at the most reasonable prices.

Select food stores in your area. Use the following form to compare these grocery stores. This information may be used to assist in selecting the store where you will shop. Circle or list the appropriate information.

CHARACTERISTICS	STORE #1	STORE #2	STORE #3
Food costs	high or low	high or low	high or low
Location of grocery store	close or far	close or far	close or far
Services provided by grocery store that you would use (list these services)	________ ________ ________ ________	________ ________ ________ ________	________ ________ ________ ________
Quality and variety of food selection	good or bad	good or bad	good or bad
Cleanliness of facility	clean or unclean	clean or unclean	clean or unclean
Attitude, friendliness, and service provided by store personnel	good or bad	good or bad	good or bad
Essential nonfood items stocked	yes or no	yes or no	yes or no
Convenient floor plan	yes or no	yes or no	yes or no
Convenient store hours	yes or no	yes or no	yes or no

Which store would you select to do most of your shopping? ______________________

____

Why would you make this selection? ______________________

____

____

FOOD PURCHASING
UNIT II

ASSIGNMENT SHEET #5--COMPARE BRAND PRICES

NAME______________________________ SCORE______________

Many different brands of items are available for purchase at the grocery store. It is possible when comparing prices of products to find that certain brands (often store brands) are available at lower prices than national brands.

Complete the following chart to compare brand prices among the products listed.

(NOTE: Fill in blanks below items with products of your own choosing. Be sure to compare products of similar size, quality, or variety.)

ITEM	NAME OF BRAND #1	PRICE	NAME OF BRAND #2	PRICE	NAME OF BRAND #3	PRICE
Peanut butter						
Corn, canned						
Detergent						
Green beans						
Jelly						

ASSIGNMENT SHEET #5

1. How many times were the store brands less expensive than the national brands?

   ____

2. How many times were the national brands less expensive than the house brands?

   ____

3. What conclusions can you draw concerning the prices of the brands that you compared?

   ____

   ____

   ____

   ____

   ____

   ____

FOOD PURCHASING
UNIT II

ASSIGNMENT SHEET #6--CALCULATE UNIT PRICES

NAME____________________________________ SCORE________________

Most foods are sold by either weight or measure. Fruits, vegetables, and meats are sold by weight. Milk, liquid juices, and beverages are sold by measure. Different containers of the same foods have different weights or measures.

Example: Canned Brand A peaches weigh 12 oz and cost $0.79
Canned Brand B peaches weigh 1 lb 4 oz (20 oz) and cost $1.25

This makes it extremely difficult to tell which container gives you the most for your money. It is necessary to learn how to compare one weight or measure with another.

To calculate unit price, divide the total weight into the purchase price.

Example: Canned Brand A peaches weigh 12 oz and cost $0.79
Canned Brand B peaches weigh 1 lb 4 oz (20 oz) and cost $1.25

BRAND A

$$\begin{array}{r} .0658 \\ 12\overline{)0.7900} \\ \underline{72} \\ 70 \\ \underline{60} \\ 100 \\ \underline{96} \\ 4 \end{array} = 6.58¢ \text{ per oz}$$

BRAND B

$$\begin{array}{r} .0625 \\ 20\overline{)1.2500} \\ \underline{1.20} \\ 50 \\ \underline{40} \\ 100 \\ \underline{100} \\ 0 \end{array} = 6.25¢ \text{ per oz}$$

Use the following weights, measures, and abbreviations to calculate unit prices.

WEIGHTS AND MEASURES

16 ounces = 1 pound
2 cups = 1 pint
2 pints = 1 quart
4 quarts = 1 gallon

1 cup = 8 fluid ounces
1 pint = 16 fluid ounces
1 quart = 32 fluid ounces
1 dozen = 12 items

ABBREVIATIONS

oz = ounce(s)
lb(s) = pound(s)
c = cup
pt(s) = pint(s)

qt(s) = quart(s)
fl oz = fluid ounce(s)
gal(s) = gallon(s)
doz = dozen
ea = each

ASSIGNMENT SHEET #6

Calculate unit prices for the following products. Show your work in the space provided.

1. One-half gallon of milk sells for $1.03.

   What is the unit price per fluid ounce?____________________________

2. One pound of cheese sells for $2.40.

   What is the unit price per ounce?____________________________

3. One dozen doughnuts sell for $1.02.

   What is the unit price per doughnut?____________________________

4. One and one-half pounds of ground beef sells for $2.20.

   What is the unit price per pound?____________________________

5. One pound, two ounces of crushed pineapple sells for 85¢.

   What is the unit price per ounce?____________________________

FOOD PURCHASING
UNIT II

ASSIGNMENT SHEET #7–ADAPT MENUS FOR SPECIFIC SITUATIONS

NAME ______________________________ SCORE ______________

Planning meals takes time and energy and is difficult even under normal conditions. But what happens when normal conditions "change?"

Examples: Dollars available for food suddenly decreases (or increases); time available for shopping or preparation is decreased (or increased); unexpected guests arrive; supply of home-grown or home-preserved foods suddenly becomes available (or unavailable); unexpected dietary needs are required; illness occurs; frozen food needed for meal was not thawed

When factors that affect food planning and preparation change, menus for meals can be changed and/or adapted in order to provide nutritious, attractive, and appetizing meals.

Adapt menus for each of the following situations to provide nutritious, attractive, and appetizing meals.

SITUATION 1

Special at Grocery Store

You have gone to the grocery store to purchase your groceries for the week for a family of four. The meat section of the grocery store is running a special on pork chops (twelve per package). You had planned to serve meat loaf, but would like to serve pork chops since they are available at a very economical price.

1. Plan for use of these pork chops in menus for the week. Use the space below.

____

____

____

____

____

____

____

____

ASSIGNMENT SHEET #7

2. Since the main dish is changed, what other changes might need to be made in the menus?

SITUATION 2

Produce Unavailable at Grocery Store

You had planned a lettuce salad for dinner in a menu this week. The lettuce at the grocery store was very poor quality. What will you purchase to substitute for this salad in your menu? List food and/or recipe below.

FOOD PURCHASING
UNIT II

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #3

1. Chicken Noodle Soup
2. Campbell's; Campbell's Soup (Texas), Inc.; Paris, Texas 75460
3. 10 3/4 oz. or 305 grams
4. Chicken stock, enriched egg noodles, chicken, water, salt, carrots, corn starch, monosodium glutamate, unbleached palm oil, chicken fat, yeast extract, and natural flavoring
5. Chicken stock
6. Campbell's
7. Chicken Noodle
8. Liquid pack
9. Two
10. Protein, Vitamin A, Vitamin C, Thiamine, Riboflavin, Niacin, Calcium, Iron
11. 51000 0 1251
12. 90
13. Protein - 6 grams
    Carbohydrate - 11 grams
    Fat - 3 grams

Assignment Sheet #6

1. 1.61¢ per fluid ounce
2. 15¢ per ounce
3. 8.5¢ per doughnut
4. $1.47 per pound
5. 4.72¢ per ounce

FOOD PURCHASING
UNIT II

TEST

NAME______________________________ SCORE______________

1. Match terms associated with food purchasing to the correct definitions. Place the correct numbers in the blanks provided.

______a. Foods that are produced or packaged for a chain store; often sold at a lower price than national brands

______b. System of placing a readable date on packages of perishable and semi-perishable products; usually represents the last date on which the product should be sold

______c. Purchases made on the spur of the moment without prior planning

______d. Foods and supplies to always have on hand for a well-stocked kitchen

______e. Bar of lines used for computerized checkout and inventory that signifies product, manufacturer, size, price, and other necessary information

______f. Classifications established by the U.S.D.A. to indicate quality of meat or produce

______g. Choosing a product from several similar products by evaluating price and label information

______h. Method of determining price to assist in comparing similar products or various sizes of the same product

______i. Product that saves time by eliminating preparation steps

______j. Label containing essential information; no brand name is given

1. Impulse buying
2. Staples
3. Universal product code
4. Open dating
5. Convenience food
6. Comparison shopping
7. Generic label
8. Store brand
9. Unit pricing
10. Grades

2. Select from the following list factors to consider when selecting a grocery store. Mark each correct answer with an "X."

______ a. Cleanliness of facility

______ b. Location

______ c. Size

______ d. Services provided

______ e. Size of front doors

______ f. Food costs

______ g. Convenient store hours

3. State recommended times to shop at the grocery store.

a. ____

b. ____

c. ____

d. ____

4. Select from the following list good food purchasing practices. Mark each correct answer with an "X."

______ a. Shop for groceries daily

______ b. Read and evaluate labels on food containers

______ c. Purchase foods in season

______ d. Make and use a grocery shopping list

______ e. Listen and watch at the check-out counter to make sure charges are made correctly

______ f. Purchase higher grades of meat, produce, or canned goods when possible

______ g. Calculate costs of shopping at a store which provides special services

______ h. Shop when it is cool outside

______ i. Always purchase foods in quantity

______ j. Calculate unit prices to compare prices of similar foods

5. State six grocery store marketing techniques.
   a. ______________________________
   b. ______________________________
   c. ______________________________
   d. ______________________________
   e. ______________________________
   f. ______________________________

6. Distinguish between required and optional information found on food labels. Place an "R" for required information and an "O" for optional information in the blanks provided.

   ______a. Net weight of contents

   ______b. Picture of product

   ______c. Directions for use

   ______d. Legal name of product

   ______e. Brand name and other identification

   ______f. Number and size of servings per container

   ______g. Name and address of manufacturer, packer, or distributor

   ______h. Information concerning variety, style of pack, and presence of packing medium on canned fruits and vegetables

   ______i. Inspection mark

   ______j. Statement of ingredients listed by common names in descending order by volume

7. Compare grocery store prices.
8. Evaluate grocery store sale items.
9. Determine label information.
10. Compare grocery stores.
11. Compare brand prices.
12. Calculate unit prices.
13. Adapt menus for specific situations.

(NOTE: If activities 7-13 have not been finished before the test, ask your instructor when they should be completed.)

FOOD PURCHASING
UNIT II

ANSWERS TO TEST

(NOTE: It may be helpful to use your blank test to make a test key. The point system designated in parentheses is intended to be a guideline and should be adapted to meet the needs of each teaching-learning process. The point total is 200.)

1. (20 points)

   a. 8
   b. 4
   c. 1
   d. 2
   e. 3
   f. 10
   g. 6
   h. 9
   i. 5
   j. 7

2. (14 points)

   a, b, d, f, g

3. (4 points)

   a. Early in the day
   b. When you are not hungry
   c. When you can shop alone
   d. When you are not too tired or rushed

4. (20 points)

   b, c, d, e, g, j

5. (12 points)

   Any six of the following:

   a. Placement of items on shelves
   b. Carefully arranged floor plan
   c. Use of lighting
   d. Use of colors
   e. Size of shopping carts

  f. Use of music
  g. Special services

6. (20 points)
  a. R
  b. O
  c. O
  d. R
  e. O
  f. O
  g. R
  h. R
  i. O
  J. R

7. Evaluated to the satisfaction of the instructor (25 points)

8. Evaluated to the satisfaction of the instructor (10 points)

9. Evaluated to the satisfaction of the instructor (15 points)

10. Evaluated to the satisfaction of the instructor (10 points)

11. Evaluated to the satisfaction of the instructor (25 points)

12. Evaluated to the satisfaction of the instructor (15 points)

13. Evaluated to the satisfaction of the instructor (10 points)

FOOD PREPARATION
UNIT III

UNIT OBJECTIVE

After completion of this unit, the student should be able to prepare nutritious meals using available food, time, energy, and money. This knowledge will be evidenced by completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with food preparation to the correct definitions.
2. Select from a list food preparation techniques for saving money.
3. Select from a list food preparation techniques for saving time.
4. Distinguish between advantages and disadvantages of convenience foods.
5. Select from a list food preparation techniques for saving energy.
6. Arrange in order steps in making a menu time-work plan.
7. Prepare convenience and home-prepared foods.
8. Compare convenience and home-prepared foods.
9. Prepare a meal.
10. Evaluate a meal.
11. Plan uses for planned overs/leftovers.

FOOD PREPARATION
UNIT III

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

A. Order films, filmstrips, or other materials planned to supplement unit.

B. Provide students with objective sheet.

C. Provide students with information and assignment sheets.

(NOTE: The assignment sheets in this unit are intended to be personalized and localized in order to meet student needs dictated by a wide variety of meal planning and preparation situations. Feel free to duplicate the assignment sheets for multiple use if more than one meal is to be planned, prepared, and served in class or as home experience.)

D. Discuss unit and specific objectives.

E. Discuss information and assignment sheets.

F. Adapt materials for special needs students.

G. Evaluate students' knowledge to determine if they have achieved competencies established in Foods and Nutrition sections of *Home Economics I: Basic Core* and *Home Economics II: Basic Core*.

H. Have students plan several all-oven meals. Explain that these meals assist in energy conservation and can be nutritionally balanced and time-saving if properly planned.

I. Allow students to work with a child development class or teacher to research and develop a list of specific cooking tasks that can be performed by children of various ages. Have students use this information to make a time-work plan for a planned menu using help from younger or older siblings.

J. Invite a home economist or resource person from the electric and/or gas utility companies to discuss fuel conservation in the kitchen. Allow this person to demonstrate time-saving and energy-saving kitchen equipment.

Examples: Pressure cooker, microwave oven, slow cooker, food processor, convection oven, electric skillet

K. Allow students to organize kitchen to prevent wasted time and motion as a home experience.

L. Allow assignment sheets to be completed as group work in the classroom.

M. Remind students that the time-work plan in Assignment Sheet #3 is for one person preparing the entire meal. This time-work plan may need to be adapted for group work. Remind students to plan for dovetailing of tasks.

N. Encourage students to complete assignment sheets as home experiences.

O. Inform students that Assignment Sheets #1 and #2, and Assignment Sheets #3 and #4 are to be used together.

P. Encourage students to prepare meals utilizing planned overs/leftovers.

Q. Supplement unit content with teaching filmstrip *Planning to Eat?: A Guide to Saving Time, Money, and Energy.* This kit contains one color filmstrip, cassette, and teacher's guide. It can be ordered from Tupperware Educational Services, P.O. Box 2353, Orlando, Florida 32802.

R. Introduce Assignment Sheet #1 with Betty Crocker filmstrip teaching kit *Convenience Foods.* This is available for purchase from General Mills, Inc., P.O. Box 113, Minneapolis, Minnesota 55440.

S. Have students use *Standards of Quality Handbook for Clothing, Foods and Home Furnishings* to assist in product evaluation. This 1979 publication is available upon request from Home Economics Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma 74074.

T. Give test.

U. Reteach if necessary.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Assignment sheets

1. Assignment Sheet #1--Prepare Convenience and Home-Prepared Foods
2. Assignment Sheet #2--Compare Convenience and Home-Prepared Foods
3. Assignment Sheet #3--Prepare a Meal
4. Assignment Sheet #4--Evaluate a Meal
5. Assignment Sheet #5--Plan Uses for Planned Overs/Leftovers

D. Test

E. Answers to test

III. Unit references:

A. Carson, Byrta; Ramee, Marue Carson; Cobe, Patricia; Stein, Jane. *How You Plan and Prepare Meals*. 3rd ed. New York: McGraw-Hill Book Co., 1980.

B. Sherwin, Sally. *Seven Steps to Rock-Bottom Food Costs*. New York: William Morrow and Co., Inc., 1976.

C. Peck, Leilani Brinkley, et al. *Focus on Food*. McGraw-Hill Book Co., 1974.

D. Cote, Patricia. *People, Food, and Science*. Lexington, Massachusetts: Ginn and Co., 1977.

E. Gross, Aleene. *Enjoying Family Living*. New York: J.B. Lippincott Co., 1977.

F. Medved, Eva. *The World of Food*. Lexington, Massachusetts: Ginn and Co., 1977.

G. Largen, Velda L. *Guide to Good Food*. South Holland, Illinois: The Goodheart-Willcox Co., Inc., 1979.

IV. Film--*All American Meal*. 11 minute color film. Pasadena, California: Barr Productions, 1974. Available from Barr Productions, 3490 E. Foothill Boulevard, Pasadena, California 91107.

(NOTE: Films and filmstrips are available on a free-loan basis to Oklahoma teachers *only* from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1515 West Sixth Avenue, Stillwater, Oklahoma 74074. Out-of-state teachers must order from addresses listed.)

V. Filmstrips:

A. *Convenience Foods*. Betty Crocker filmstrip teaching kit. Minneapolis, Minnesota: General Mills, Inc., n.d.

(NOTE: Available for purchase from General Mills, Inc., P.O. Box 113, Minneapolis, Minnesota 55440.)

B. *Meal Planning Series*. Color filmstrip, cassettes, and teacher's guides. Four individual programs in series. Altoona, Pennsylvania: Butterick Publishing Co., 1978.

(NOTE: Available for purchase from Butterick Publishing Company, P.O. Box 1914, Altoona, Pennsylvania 16603.)

C. *Planning to Eat?: A Guide to Saving Time, Money, and Energy*. One color filmstrip, cassette, and teacher's guide. Orlando, Florida: Tupperware Educational Services, n.d.

(NOTE: Available for purchase from Tupperware Home Parties, Educational Services Division, P.O. Box 2353, Orlando, Florida 32802.)

FOOD PREPARATION
UNIT III

INFORMATION SHEET

I. Terms and definitions

A. Dovetail tasks--Doing two or more things at the same time

Examples: Prepare a lettuce salad while a pie is baking; set the table while the roast is in the oven; clean up kitchen while bread is baking

B. Time management--Efficient way to plan meal preparation so that tasks are dovetailed

C. Time-work plan--Written method to show time and tasks involved in preparing food to ensure that foods are ready to serve at the correct times and temperatures

D. Convenience food--Product that saves time by eliminating preparation steps

Examples: Mixes, ready-to-eat, dehydrated, ready-to-heat, thaw-and-serve foods

II. Food preparation techniques for saving money (Assignment Sheet #5)

A. Prepare foods in quantities and preserve them for future use

B. Serve inexpensive, high-nutrient foods

(NOTE: Avoid serving expensive, empty-calorie foods such as potato chips, candy, and soft drinks.)

C. Substitute lower-cost foods when possible

Examples: Substitute stew meat for roast and in-season produce for out-of-season produce

D. Use in-season foods

E. Use meat substitutes

Examples: Eggs, cheese, milk, beans, peanut butter, soy protein

F. Use meat extenders

Examples: Rice, oatmeal, bread crumbs, macaroni

INFORMATION SHEET

G. Use dried milk instead of fresh milk

H. Serve fruits and vegetables in raw form when possible

I. Use leftovers and other available foods

(NOTE: Avoid wasting foods.)

J. Avoid adding optional ingredients to recipes

Examples: Mushrooms, nuts, preserves, toppings, spreads

K. Prepare foods in a way to preserve maximum nutritional value

III. Food preparation techniques for saving time

A. Prepare foods in quantity and store for future use

Example: Stew that is prepared in a large quantity can be frozen for later use

B. Develop and use a time-work plan

(NOTE: This time-work plan should be developed around planned menus.)

C. Use easy-to-prepare or convenience foods

D. Serve fruits and vegetables in raw form when possible

E. Avoid frequent use of foods that require cleaning, chopping, or mixing

F. Organize kitchen work centers

(NOTE: This can eliminate unnecessary steps and energy usage.)

G. Use time-saving appliances

Examples: Microwave or convection oven

IV. Advantages and disadvantages of convenience foods (Assignment Sheets #1 and #2)

A. Advantages

1. Save time and energy

2. Enable inexperienced cooks to prepare foods confidently

3. Assist cooks to prepare complicated foods and meals more easily

INFORMATION SHEET

B. Disadvantages

1. Lack flavor of home-prepared foods
2. Require that food labels and preparation instructions be read and followed carefully
3. May cost more than home-prepared foods

V. Food preparation techniques for saving energy

A. Thaw frozen food in refrigerator before cooking

B. Preheat oven only when product quality will be affected

Examples: Breads, cakes, popovers, and pies require preheating

C. Use correct sizes of pots and pans for range surface units

D. Cook foods in pans covered with tight-fitting lids

E. Prepare all-oven and all-broiler meals to take advantage of a single energy source

F. Use small appliances when suitable

(NOTE: Small appliances use less energy than large ones.)

G. Avoid unnecessary opening and closing of oven, refrigerator, and freezer

Example: Try to remove all needed items from the refrigerator and/or freezer at one time to eliminate cold air loss

H. Check progress of foods in oven by looking through oven door window

(NOTE: If you have no window, open and close the door as little as possible.)

I. Turn controls down on surface cooking units when desired temperatures have been reached

(NOTE: This conserves fuel and liquid.)

J. Cook foods in as little water as possible

VI. Steps in making a menu time-work plan (Assignment Sheets #3 and #4)

A. Decide on serving time and time available for preparation

B. Plan menu

C. Select recipes

INFORMATION SHEET

D. List food supplies and utensils needed

E. Identify tasks

F. Indicate time to begin each task and, if needed, time task should be completed

(NOTE: Begin plan with foods that take the longest and dovetail jobs when possible. Success in a time-work plan is measured by all the foods being ready to serve at the correct times and temperatures.)

FOOD PREPARATION
UNIT III

ASSIGNMENT SHEET #1--PREPARE CONVENIENCE AND HOME-PREPARED FOODS

NAME____ SCORE____________

Convenience foods can save valuable time and energy; they can also differ in cost and quality from home-prepared foods. It is up to you as a consumer to evaluate and decide whether to use convenience foods or to prepare foods from "scratch."

Select one food that can be purchased and/or prepared in at least four different forms. Answer the questions that follow concerning your selection.

Examples: Home-made spaghetti with meat sauce
Canned spaghetti with meat sauce
Boxed spaghetti dinner with meat sauce
Frozen spaghetti with meat sauce

1. What food have you selected to prepare and compare? ______________________

   ____

2. What food forms are you going to prepare and compare?

   a. ____
   (home-prepared)

   b ____
   (convenience food)

   c. ____
   (convenience food)

   d. ____
   (convenience food)

Complete the following time-work plans for each food form. Attach needed recipes to the appropriate time-work plan. Use the completed time-work plans to prepare these food forms.

ASSIGNMENT SHEET #1

TIME-WORK PLAN

Name ____________________

Food to Prepare: ____________________ (home-prepared)

Kitchen ____________________

Food Supplies Needed:

Utensils Needed:

Order of Work	Time in Minutes
1.	
2.	
3.	
4.	
5.	
6.	
7.	

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ASSIGNMENT SHEET #1

TIME-WORK PLAN

Name ______________________

Food to Prepare: ______________________ (convenience food)

Kitchen ______________________

Food Supplies Needed:

______________________ ______________________
______________________ ______________________
______________________ ______________________
______________________ ______________________
______________________ ______________________
______________________ ______________________

Utensils Needed:

______________________ ______________________
______________________ ______________________
______________________ ______________________
______________________ ______________________
______________________ ______________________
______________________ ______________________

Order of Work	Time in Minutes
1.	
2.	
3.	
4.	
5.	
6.	
7.	

ASSIGNMENT SHEET #1

TIME-WORK PLAN

Name ____________________

Food to Prepare: ____________________ (convenience food)

Kitchen ____________________

Food Supplies Needed:

Utensils Needed:

Order of Work	Time in Minutes
1.	
2.	
3.	
4.	
5.	
6.	
7.	

ASSIGNMENT SHEET #1

TIME-WORK PLAN

Name ______________________

Food to Prepare: ______________________
(convenience food)

Kitchen ______________________

Food Supplies Needed:

Utensils Needed:

Order of Work	Time in Minutes
1.	
2.	
3.	
4.	
5.	
6.	
7.	

FOOD PREPARATION
UNIT III

ASSIGNMENT SHEET #2--COMPARE CONVENIENCE AND HOME-PREPARED FOODS

NAME____ SCORE____________

Convenience foods are designed to save the consumer time and energy; they can also differ in cost and quality from home-prepared foods. The consumer must decide which is more important.

Complete the following chart as you compare home-prepared and convenience foods.

	HOME MADE	CONVENIENCE FORM #1	CONVENIENCE FORM #2	CONVENIENCE FORM #3
FOOD BEING COMPARED				
TOTAL COST				
NUMBER OF SERVINGS				
COST PER SERVING				
PREPARATION TIME				
TASTE				
TEXTURE				
APPEARANCE				

ASSIGNMENT SHEET #2

1. Considering the results of your comparison between home-made and convenience foods, which food form would you purchase and/or prepare for you or your family?

____

2. Why would you make this decision?

____

____

____

____

____

____

FOOD PREPARATION
UNIT III

ASSIGNMENT SHEET #3--PREPARE A MEAL

NAME____ SCORE____________

Preparing foods so that they can be served at correct times and temperatures is not always an easy task. It takes planning to ensure success in meal preparation. Plan your menu according to your meal preparation situation. You might plan a meal for one person or for many. You might plan a buffet supper, luncheon, tea, reception, traditional meal, or a holiday meal. Be sure to consider time and dollars that are available, use of available leftover food or convenience foods, advertised "specials," type of meal function, number of people eating the meal, nutritional needs, facilities and equipment available for storage, preparation, and serving, "in-season" foods, and perhaps adapting a menu for a special situation. Also consider selection of foods for color, form, variety, texture, temperature, and flavor as you plan your menu.

Use the following forms to assist you in your meal planning process. Menu time-work plans are useful tools that help organize meal preparation and service. They especially help the person just learning to prepare meals. They also provide logical organization of jobs as well as listing grocery items and utensils needed for preparation and serving.

The goal of a menu time-work plan is to see that all foods will be ready to serve at correct times and temperatures. Use the following individual and group time-work plans as a guide to plan your own. Use recipe books or other references to help you.

ASSIGNMENT SHEET #3

Examples:

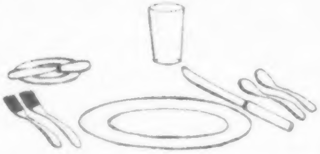
This Recipe is for Oven-Fried Chicken Yield: 4 servings

Ingredients

Chicken, medium sized
Butter or Margarine, 1/2 cup
Corn flakes, 8 cups
Salt
Pepper

Preparation Instructions: Preheat oven to 350°. Butter baking dish. Cut up chicken. Melt margarine in a medium sized saucepan. Place cornflakes in a plastic bag and roll with rolling pin to break flakes into small pieces. Roll each chicken piece in melted margarine and then shake in bag of corn flakes, being careful to thoroughly coat chicken pieces. Place chicken pieces in baking dish. Season with salt and pepper. Pour 2-3 tablespoons of melted margarine in baking dish. Cover baking dish with foil. Place in oven. Cook for 1 hour or until desired doneness is reached.

This Recipe is for Buttered Corn Yield: 4 servings



Ingredients

Frozen Corn, 10 oz. package
Salt
Water, 3 T
Margarine, 3 T
Pepper

Preparation Instructions: Place water and frozen corn in a medium-sized saucepan. Place lid on pan. Cook over medium heat for 10 minutes or until desired doneness is reached. Remove lid. Add butter, salt, and pepper. Replace lid, allowing margarine to melt. Stir before serving. Serve hot.

ASSIGNMENT SHEET #3

Examples:

This Recipe is for Marinated Vegetable Salad   Yield: 8 servings

Ingredients

Onion, 1 large white
Bell pepper, 2 large
Cauliflower, 1 head
Mushrooms, 1 lb. fresh
Broccoli, 1 lb. fresh
Tomatoes, 2 large
Italian, Russian, or French dressing, 20 ounces

Preparation Instructions: Clean and cut or break vegetables into bite-sized pieces. Place in a large glass or plastic container. Add salad dressing. Allow to marinate overnight, if possible, stirring occasionally. Store leftovers in covered container in refrigerator.

This Recipe is for Biscuits   Yield: 20 biscuits

Ingredients

Flour, 2 cups all-purpose
Baking powder, 3 t.
Salt, 1 t.
Shortening, 1/4 c.
Milk, 3/4 c.

Heat oven to 450°. Mix dry ingredients well in bowl. Cut in shortening with pastry blender until mixture looks like "meal." Stir in almost all the milk. If dough does not seem pliable, add enough to make a soft, puffy dough easy to roll out. (Too much milk makes dough sticky, not enough makes biscuits dry.) Round up on lightly floured cloth-covered board. Knead lightly 10 to 12 times. Handle lightly.

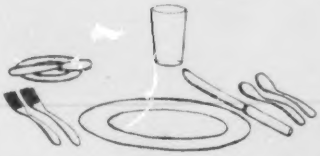
Roll dough or pat out (with floured hand) to about 1/2" thickness. Cut close together with floured biscuit cutter. For speed, cut in squares with knife. Fit leftover bits together. (Do not reknead.) Pat out dough, roll smooth and cut as desired. Place close together for biscuits with soft sides, an inch apart for biscuits with crusty sides, on ungreased baking sheet. Place in middle of oven. Bake 10 to 12 minutes. Serve piping hot. Makes possibly, twenty 1 3/4" biscuits (1" high).

ASSIGNMENT SHEET #3

Example:

This Recipe is for Apple Crunch Yield: 4 servings

Ingredients



Apple Pie filling,
  1 can, 20 oz.
White cake mix, 9 oz.
Margarine, 1/2 cup

Preparation Instructions: Preheat oven to 350°. Butter baking dish. Spread pie filling evenly in bottom of 8x8x2 inch baking dish. Sprinkle cake mix over pie filling. Cut and drop tablespoons of margarine on top of cake mix. Be sure to distribute margarine evenly. Place in preheated oven. Bake for 30 minutes or until desired doneness is reached.

ASSIGNMENT SHEET #3

SAMPLE MENU TIME-WORK PLAN

NAME BUD HENDRIX SCORE

KITCHEN #1 Number Meal Serves: 4

MENU

Oven-Fried Chicken
Buttered Corn
Marinated Vegetable Salad
Biscuits
Apple Crunch
Iced Tea Milk

FOOD SUPPLIES NEEDED:

Chicken, medium sized
Margarine, 1 cup + 3 T.
Cornflakes, 4 cups
Salt
Pepper
Onion, 1 large white
Bell pepper, 2 large
Cauliflower, 1 head
Fresh mushrooms, 1 lb.
Fresh broccoli, 1 lb.
Tomato, 2 large
Salad dressing, 20 oz. (Italian, Russian, or French)
Frozen corn, 10 ounce package
Flour, 2 cups
Baking powder, 3 tsp.

Shortening, 1/4 cup
Milk, 3/4 cup
Apple pie filling, one 20 ounce can
White cake mix, 9 ounce
Tea
Milk
Ice

ASSIGNMENT SHEET #3

UTENSILS NEEDED FOR PREPARATION AND SERVING:

Measuring spoons and cups
Butcher knife
Baking dish, one 9" x 13" x 2", one 8" x 8" x 2"
Sauce pan, 2
Paring knife
French knife
Container for marinated salad
Serving spoons for corn, salad, dessert
Glasses, 4
Butter dish
Cookie sheet
Biscuit cutter
Pastry blender
Plates, 4
Flatware, 4 sets
Serving dishes for corn, bread, and salad
Serving fork for chicken

	JOB TO BE DONE--INDIVIDUAL PLAN	TIME TABLE	TIME IN MINUTES
1.	Gather supplies	5:00 p.m.	5
2.	Gather utensils	5:05	5
3.	Turn on oven	5:10	1
4.	Prepare chicken for oven	5:11	14
5.	Place chicken in oven	5:25	1
6.	Prepare marinated vegetable salad	5:26	19
7.	Prepare apple crunch	5:45	10
8.	Prepare biscuits	5:55	15
9.	Prepare buttered corn	6:10	10
10.	Set table	6:20	5
11.	Prepare iced tea/milk glasses	6:25	5
12.	Serve foods	6:30	5
13.	Eat dinner	6:35	20
14.	Clean up	6:55	
15.			
16.			

ASSIGNMENT SHEET #3

JOB TO BE DONE–GROUP PLAN

(NOTE: This example is prepared during 2 class periods of 55 minutes with 4 groups preparing meal.)

DAY 1			
GROUP #	JOB TO BE DONE	TIME TABLE	TIME IN MINUTES
ALL	1. Gather supplies	10:00	5
ALL	2. Gather equipment	10:05	5
1	3. Preheat oven	10:10	1
1	4. Prepare chicken for oven	10:11	15
1	5. Bake chicken	10:26	60
Teacher	6. Remove from oven, let cool and place in refrigerator	11:26	
2	7. Prepare apple crunch	10:10	10
3	8. Prepare marinated salad	10:10	20
4	9. Prepare biscuits (except for liquid)	10:10	10
4	10. Prepare tea	10:20	10
ALL	11. Clean up (each group is responsible for their own preparations)	To begin at completion of preparation tasks	15

ASSIGNMENT SHEET #3

DAY 2			
GROUP #	JOB TO BE DONE	TIME TABLE	TIME IN MINUTES
Teacher	1. Preheat ovens; one 350° and other 450°		
1	2. Warm chicken for 15 minutes	10:00	1
2	3. Place apple crunch in oven (NOTE: Bake apple crunch and warm chicken in same oven at 350°. Apple crunch will finish baking while class is eating.)	10:00	1
4	4. Add liquid to biscuits and complete preparation	10:00	7
2	5. Prepare buttered corn	10:01	10
1 & 3	6. Set table	10:01	10
3	7. Prepare milk and tea glasses	10:11	5
ALL	8. Eat	10:20	20
	9. Clean up	10:40	15
2	a. Wash		
3	b. Dry		
1	c. Put away		
4	d. Clean table and foods lab area		
ALL	10. Evaluate	Complete on Day 3	10

ASSIGNMENT SHEET #3

This Recipe is for Yield:

Ingredients

Preparation Instructions:

This Recipe is for Yield:

Ingredients

Preparation Instructions:

ASSIGNMENT SHEET #3

This Recipe is for ______________________ Yield: __________

Ingredients

Preparation Instructions: ______________________

This Recipe is for ______________________ Yield: __________

Ingredients

Preparation Instructions: ______________________

ASSIGNMENT SHEET #3

This Recipe is for ____________________ Yield: ________

Ingredients

Preparation Instructions: ____________________

ASSIGNMENT SHEET #3

MENU TIME-WORK PLAN

NAME________________________ SCORE____________

KITCHEN________________________ Number Meal Serves:________

MENU

FOOD SUPPLIES NEEDED:

FN - 105-C

ASSIGNMENT SHEET #3

UTENSILS NEEDED FOR PREPARATION AND SERVING:

JOB TO BE DONE	TIME TABLE	TIME IN MINUTES
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

FOOD PREPARATION
UNIT III

ASSIGNMENT SHEET #4--EVALUATE A MEAL

NAME ________________________ SCORE __________

Evaluation of process and product is necessary if improvement is to take place. Answer the following questions after you prepare a meal. Use these questions to assist you in improving as you continue to prepare meals.

1. Was the meal nutritionally well-balanced? ____________________

   Explain your answer: ____________________

2. Did the foods vary in color, flavor, size, shape, texture, and temperature? __________

   __________ Explain your answer: ____________________

3. Did you have all food supplies needed? ____________________

   Explain your answer: ____________________

ASSIGNMENT SHEET #4

4. Did you have all utensils needed for preparation and serving? ____________________

   Explain your answer: ____________________

5. Was meal preparation, serving, and clean-up completed on time? ____________________

   Explain your answer: ____________________

6. What were the reactions to the meal from those eating it? ____________________

7. What changes would you make if preparing this meal again? ____________________

FN - 109-C

FOOD PREPARATION
UNIT III

ASSIGNMENT SHEET #5--PLAN USES FOR PLANNED OVERS/LEFTOVERS

NAME ______________________________ SCORE ____________

Planning ahead for use of leftovers can save you time, energy, and money.

Suppose that you have purposely cooked more than you or your family can eat of each of the foods listed on the left and two of your choice. Plan three possible uses for each of these foods. Recipe books or other references may be helpful to you as you complete this assignment.

LEFTOVERS	1	2	3
Whole roasted chicken			
10 lb. ham			
5 lb. roast			
Rice			
(Other)			
(Other)			

FOOD PREPARATION
UNIT III

TEST

NAME______________________________ SCORE____________

1. Match terms associated with food preparation to the correct definitions. Write the correct numbers in the blanks provided.

   ______a. Product that saves time by eliminating preparation steps

   ______b. Efficient way to plan meal preparation so that tasks are dovetailed

   ______c. Doing two or more things at the same time

   ______d. Written method to show time and tasks involved in preparing food to ensure that foods are ready to serve at the correct times and temperatures

   1. Dovetail tasks
   2. Time management
   3. Time-work plan
   4. Convenience food

2. Select from the following list food preparation techniques for saving money. Mark each correct answer with an "X."

   ______a. Serve expensive, high-calorie foods

   ______b. Substitute lower-cost foods when possible

   ______c. Add optional ingredients

   ______d. Use in-season foods

   ______e. Use meat substitutes

   ______f. Prepare small quantities of foods

3. Select from the following list food preparation techniques for saving time. Mark each correct answer with an "X."

   ______a. Prepare foods in quantity and store for future use

   ______b. Develop and use a time-work plan

   ______c. Use foods that require cleaning, chopping, or mixing

   ______d. Use easy-to-prepare or convenience foods

   ______e. Cook fruits and vegetables when possible

4. Distinguish between advantages and disadvantages of convenience foods. Place an "A" before advantages and a "D" before disadvantages in the blanks provided.

   ______a. Enable inexperienced cooks to prepare foods confidently

   ______b. Require that food labels and preparation instructions be read and followed carefully

   ______c. Assist cooks to prepare complicated foods and meals more easily

   ______d. Save time and energy

   ______e. May cost more than home-prepared foods

5. Select from the following list food preparation techniques for saving energy. Mark each correct answer with an "X."

   ______a. Use small appliances when suitable

   ______b. Thaw frozen food in the oven before cooking

   ______c. Use correct sizes of pots and pans for range surface units

   ______d. Preheat oven before cooking most foods

6. Arrange in order steps in making a menu time-work plan. Place a "1" before the first step, a "2" before the second step, and so on in the blanks provided.

   ______a. Decide on serving time and time available for preparation

   ______b. Identify tasks

   ______c. Indicate time to begin each task and, if needed, time task should be completed

   ______d. List food supplies and utensils needed

   ______e. Plan menu

   ______f. Select recipes

7. Prepare convenience and home-prepared foods.

8. Compare convenience and home-prepared foods.

9. Prepare a meal.

10. Evaluate a meal.

11. Plan uses for planned overs/leftovers.

(NOTE: If activities 7-11 have not been finished before the test, ask your instructor when they should be completed.)

FOOD PREPARATION
UNIT III

ANSWERS TO TEST

(NOTE: It may be helpful to use your blank test to make a test key. The point system in parentheses is intended to be a guideline and should be adapted to meet the needs of each teaching-learning process. The point total is 200.)

1. (8 points)

   a. 4

   b. 2

   c. 1

   d. 3

2. (12 points)

   b, d, e

3. (10 points)

   a, b, d

4. (10 points)

   a. A

   b. D

   c. A

   d. A

   e. D

5. (8 points)

   a, c

6. (12 points)

   a. 1

   b. 5

   c. 6

   d. 4

   e. 2

   f. 3

7. Evaluated to the satisfaction of the instructor (40 points)
8. Evaluated to the satisfaction of the instructor (10 points)
9. Evaluated to the satisfaction of the instructor (50 points)
10. Evaluated to the satisfaction of the instructor (10 points)
11. Evaluated to the satisfaction of the instructor (30 points)

SOCIAL AND ENTERTAINMENT SKILLS
UNIT IV

UNIT OBJECTIVE

After completion of this unit, the student should be able to carry out plans for entertaining. This knowledge will be evidenced by completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with social and entertainment skills to the correct definitions.
2. Match types of serving styles to correct descriptions.
3. State reasons for entertaining.
4. Arrange in order steps in successful entertaining.
5. Select from a list information to include in an invitation.
6. Discuss proper ways to respond to an invitation.
7. Select from a list guidelines for making introductions.
8. Distinguish between responsibilities of guests and hosts/hostesses.
9. Select from a list factors to consider in the selection of foods to serve when entertaining.
10. State rules for good table manners.
11. Select from a list proper etiquette guidelines for eating in a restaurant.
12. Prepare an invitation.
13. Respond to an invitation.
14. Prepare introductions.
15. Plan menus for specific situations.
16. Carry out plans to entertain informally.
17. Carry out plans to entertain formally.

SOCIAL AND ENTERTAINMENT SKILLS
UNIT IV

SUGGESTED ACTIVITIES

I. Suggested activities for the instructor:

A. Order films, filmstrips or other materials planned to supplement unit.

B. Provide students with objective sheet.

C. Provide students with information and assignment sheets.

D. Discuss unit and specific objectives.

E. Adapt materials for special needs students.

F. Supplement unit with classes on cake decorating. Assist students in developing skills that could assist them in becoming employable. The following references can be ordered to assist you in cake decorating classes:

Maid of Scandivania
3244 Raleigh Avenue
Minneapolis, Minnesota 55416
Phone: (612) 927-7996 or 1-800-328-6722

Wilton Enterprises, Inc.
2240 W. 75th Street
Woodridge, Illinois 60515

G. Demonstrate ways to do creative garnishes or appetizers. Explain the use of these in meal preparation and entertaining.

Examples: Radish roses, carrot curls

H. Invite resource person to discuss meal preparation for large groups. Include in discussion alternatives to food selection and ways to set up and serve to large groups. Provide students with the opportunity to plan several meals that could serve large groups.

I. Have student roleplay situations allowing them to practice good table manners and proper etiquette for eating in a restaurant.

J. Gather supplies, such as construction paper and trims, to assist students in creating an original invitation in Assignment Sheet #1.

K. Provide students a display of purchased invitations to assist them with Assignment Sheet #1.

L. Allow students to complete Assignment Sheets #5 and #6 as home experiences.

M. Have student brainstorm foods to be served at holiday and special events.

Examples: Christmas, Thanksgiving, birthday celebration

N. Supplement unit with Foreign Foods units. These units are available for purchase from the Instructional Materials Laboratory, 10 Industrial Education Building, University of Missouri, Columbia, Missouri 65211.

O. Demonstrate skills for serving large cuts of meat.

Examples: Carving a turkey, ham and roast beef

P. Explain ways to cut and serve wedding cake.

Q. Allow students to practice table setting for a buffet, tea or reception. Discuss ways to help the serving line flow.

R. Encourage students to be creative in making cut-up cakes, appetizers, candies, and cookies. Use the following references to assist you:

1. *Baker's Cut-up Cake Party Book and Baker's Chocolate and Coconut Favorites* available for purchase from General Foods Corporation, P.O. Box 4114, Kankakee, Illinois 60901.
2. Betty Crocker's *Cut Up Cake Book* available for purchase from General Mills, Inc., P.O. Box 1113, Minneapolis, Minnesota 55440.

S. Assist students in entering the Lenox Tablesetting contest. For further information write Lenox China and Crystal, Lawrenceville, New Jersey 08648.

T. Allow students to study and prepare table cloths, napkins, placemats, centerpieces and table accessories during this unit.

U. Supplement unit with films available on a free-loan basis from Lenox China and Crystal, Lawrenceville, New Jersey, 08648. Films are titled "Of Earth and Fire" and "You Always Have the Nicest Parties."

V. Have FHA-HERO members plan and give a party for kindergarten children as a class project.

W. Give test.

X. Reteach if necessary.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Assignment sheets

1. Assignment Sheet #1--Prepare an Invitation

2. Assignment Sheet #2--Respond to an Invitation

3. Assignment Sheet #3--Prepare Introductions

4. Assignment Sheet #4--Plan Menus for Specific Situations

5. Assignment Sheet #5--Carry Out Plans to Entertain Informally

6. Assignment Sheet #6--Carry Out Plans to Entertain Formally

D. Test

E. Answers to test

III. Unit references:

A. Sawatzky, Joyce. *Family Living.* Stillwater: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1978.

B. Carson, Byrta; Ramee, Marue Carson; Cobe, Patricia; Stein, Jane. *How You Plan and Prepare Meals.* 3rd ed. New York: McGraw-Hill Book Co., 1980.

C. Kowtaluk, Helen, and Kopan, Alice D. *Food for Today.* Peoria, Illinois: Chas. A. Bennett Co., Inc., 1977.

D. *Betty Crocker's Cookbook.* New York: Golden Press, 1969.

E. *Party Planning Principles*. Chicago, Illinois: Morton Salt Company, n.d.

F. Miller, Elsie Lee, and Tinklin, Gwendolyn L. *Hospitality Hints.* Manhattan: Kansas State University Extension Service, May, 1966.

G. *You're Entertaining.* Chester, Pennsylvania: Home Service Center, Scott Paper Company, n.d.

SOCIAL AND ENTERTAINMENT SKILLS
UNIT IV

INFORMATION SHEET

I. Terms and definitions

A. RSVP--Letters standing for the French words, "Respondez s'il vous plait," meaning "Reply, please"

(NOTE: Informal invitations may simply say, "Please let me know if you can come.")

B. Tipping--Percentage of bill given for good service

C. Invitation--Written or oral message asking someone to attend a specific function

D. Introduction--Formal presentation of one person to another

E. Manners--Acceptable social behavior

F. Etiquette--Manners established as acceptable or required in social situations

II. Types of serving styles

A. Family--Food is placed on the table; diners sit down and help themselves, or are served by the host/hostess, who remains seated

B. Continental--Food is served directly from the kitchen, with help as needed; diners are seated

C. Compromise--Combination of family style and continental style serving; soup, salad and dessert are served from kitchen and meat and other foods are served at the table

(NOTE: This style of serving is popular with hosts and hostesses who have limited kitchen and dining space.)

D. Buffet--Foods and accessories are set out on one table at which diners line up to serve themselves; diners seat themselves at another table, where napkins and glasses are placed

(NOTE: This prevents diners from juggling these in addition to full plates.)

III. Reasons for entertaining

(NOTE: Most of the reasons people entertain center around meeting social needs of individuals.)

A. Provide enjoyment

INFORMATION SHEET

B. Celebrate holidays

Examples: Christmas tasting party, Fourth-of-July picnic, Thanksgiving dinner, Easter brunch

C. Repay hospitality extended

D. Make business contacts

Examples: Take a prospective employer or employee out to lunch, hold a dinner meeting for committee members

E. Promote sales of products

Examples: Clothing, jewelry, makeup and housewares parties

F. Celebrate special occasions

Examples: Birthday, bridal shower, wedding shower, anniversary, winning a football game, new FHA member initiation

IV. Steps in successful entertaining (Assignment Sheets #5 and #6)

A. Set date and time

B. Make a guest list

(NOTE: Consider space available and budget when deciding number of guests and who to invite.)

C. Decide kind of event

Examples: Casual, formal, indoors, outdoors, dinner, dessert, holiday celebration, birthday, shower, small or large group

D. Send out invitations

E. Decide what to serve

F. Decide how to serve

Examples: Family, continental, compromise, or buffet style

G. Plan entertainment

(NOTE: A good idea for entertainment is better than expensive decorations or fancy food. THE BEST PLANNED PARTIES ARE THOSE WHICH GIVE EVERYONE A CHANCE TO TAKE PART.)

H. Develop time-work plan

(NOTE: Good planning results in everything being ready before guests arrive. This allows you to be comfortable and organized for this special occasion.)

INFORMATION SHEET

I. Get everything ready

Examples: House, food

(NOTE: Be sure to allow time for getting *yourself* ready for this special occasion!)

J. Greet guests

K. Introduce guests

L. Carry out entertainment plans

M. Mingle with guests

(NOTE: Visit with everyone. Avoid spending most of your time with only one or two people. Talk with people about subjects that they are interested in. Also, try to get shy or quiet people involved.)

N. Bid farewell to guests

V. Information to include in an invitation (Assignment Sheet #1)

A. WHO is entertaining

B. WHEN it will be held

Examples: Date, time that party begins, time that party ends

C. WHERE it will be held

Examples: Complete address, map of how to get there if address is not easy to find

D. WHY it is being held

(NOTE: Guests would want to know if the party is for a birthday, an anniversary, or other occasion to determine if they need to bring a gift.)

E. WHAT kind of entertainment is planned

F. WHAT to wear

(NOTE: This is especially important if it is to be informal, formal or a costume party. Your guests will want to dress appropriately.)

VI. Proper ways to respond to an invitation (Assignment Sheet #2)

A. Answer invitations as soon as possible

B. Give answer directly to the person who invited you

INFORMATION SHEET

C. Repeat the date, time, and place to be sure that you have not made an error

D. Express your pleasure at having been invited

VII. Guidelines for making introductions (Assignment Sheet #3)

(NOTE: One important responsibility of a hostess/host includes seeing that all guests know each other. Introductions need not be awkward if you can practice the simple rules!)

A. Look at the person to whom you are speaking

B. Introduce males to females

(NOTE: A woman's name should be said before that of a man, unless the preposition "to" is prefixed to the lady's name.)

Examples: "Sarah, may I introduce Jim Dunn?"

"Mr. Dunn, I would like to introduce you to Sarah."

C. Introduce younger persons to older persons

Example: "Ms. Gray, I would like for you to meet my son, Jon Mussett."

D. Introduce all individuals to clergy representatives

Example: "Father O'Neal, may I present my mother?"

VIII. Responsibilities of guests and hosts/hostesses

A. Hosts/hostesses

1. Determine amount of money available for event

(NOTE: When sharing the role of host or hostess be sure to assume responsibility for your share of expenses and work!)

2. Send out invitations two to four weeks in advance

(NOTE: This allows time for guests to respond and make needed arrangements, such as the purchase of clothing or babysitting arrangements. Informal invitations may appropriately be issued within a shorter period of time.)

3. Plan foods that will assist in meeting part of daily nutritional requirements

4. Serve foods in the style best suited to type of entertaining

Examples: Family, continental, compromise, or buffet style

INFORMATION SHEET

5. Invite guests that are compatible

6. Get everything ready

   Examples: Food, decorations, centerpiece, yourself, adjusting temperature of rooms to ensure adequate ventilation

7. Greet guests

8. Make necessary introductions among guests

9. Carry out entertainment plans

10. Mingle with guests

11. Bid farewell to guests

B. Guests

1. Respond to invitation promptly

2. Arrive and leave on time

3. Park properly

   (NOTE: Avoid parking on lawns and blocking driveways.)

4. Mingle with other guests

5. Express appreciation for invitation

   (NOTE: This is often done again in a thank-you note to the host or hostess after the event. Often, guests will present candy, food, flowers or wine to the host/hostess upon arrival as thanks for having been invited.)

6. Don't take someone else to event without prior approval from host/hostess

7. Don't be an uninvited guest

IX. Factors to consider in the selection of foods to serve when entertaining (Assignment Sheet #4)

A. Type of occasion

   Examples: Picnic, tea, dinner, buffet, wedding

B. Time of day and year

   Examples: Christmas tea, buffet at Thanksgiving

INFORMATION SHEET

C. Ages and preferences of people invited

D. Budget

E. Number of people

F. Time available for preparation

G. Type of serving dishes, equipment and utensils available

H. Availability of storage space

(NOTE: The availability of freezer or refrigerator space allows preparation and storage of foods for entertaining ahead of time.)

I. Contrast in flavor, color and texture of foods to be served

J. Nutritional value of foods

K. Foods served previously to guests

(NOTE: This will help prevent duplication of menus and will provide for variety in foods.)

X. Rules for good table manners

A. Observe host/hostess and follow his or her example

B. Don't draw attention to yourself

Examples: Stir coffee or tea only once or twice to mix in cream and/or sugar

Break off one small piece of bread and butter and eat

Never sniff food while you are trying to decide to eat it

Never say, "I'm full," or "I can't eat again for a week."

Never gulp water--sip from the glass quietly between bites

Never play with your food

Never remark how many calories are being eaten

Never scoop out a baked potato, season it, and churn it back and forth with your fork--break it open with your fork and eat it from the skin

Never continue eating long after others have stopped

Never say, "I don't like it," about any food that is offered, find fault with food, or make a face with food

INFORMATION SHEET

Never tip your chair back so that is rests on only two legs

Never blow on your food to cool it

Never cut up all of your food before beginning to eat

Remove your spoon from a cup or tall glass

C. Think about the comfort of others

Examples: Take small bites and eat all of each bite at one time

Never stretch your legs out far enough under the table to accidently kick another person

Never let your plate look messy, such as pouring catsup over all food

Never talk or drink with food in your mouth

Never scratch your head, yawn, stretch, or slouch at the table

Never load your fork or spoon too heavily

Never crumble crackers or bread in your soup

Never talk too much, interrupt others, or sit in gloomy silence

Never reach across the table in front of anyone

Take bites small enough to control easily

Never serve yourself with your own silver

Never put your fingers in your mouth except in an emergency, such as to retrieve a small bone

Never pick your teeth in front of others

Always chew your food silently, with your mouth closed

Always take your soup from the side of the spoon--never meet any spoon head on

Avoid criticizing others

XI. Proper etiquette guidelines for eating in a restaurant

A. Head waiter or hostess (if available) will show you to table when you arrive

B. Men may hold chairs for women; if there are no men in the party, the waiter or hostess may hold the chair

INFORMATION SHEET

C. Men should remove their top coats before entering the dining room

D. Women should remove coats as they are seated

(NOTE: The woman should never place her purse on the table.)

E. Men may order for women after they have made their preferences known

F. Waiters or waitresses may make suggestions or answer questions

G. Good manners should always be used

H. Appropriate tip should always be left for good service

(NOTE: The most common flexible limits are between a minimum of 15 percent and a maximum of 20 percent. However, if you have asked for special services, tip accordingly.)

I. You should not linger at the table when finished

FN - 129-C

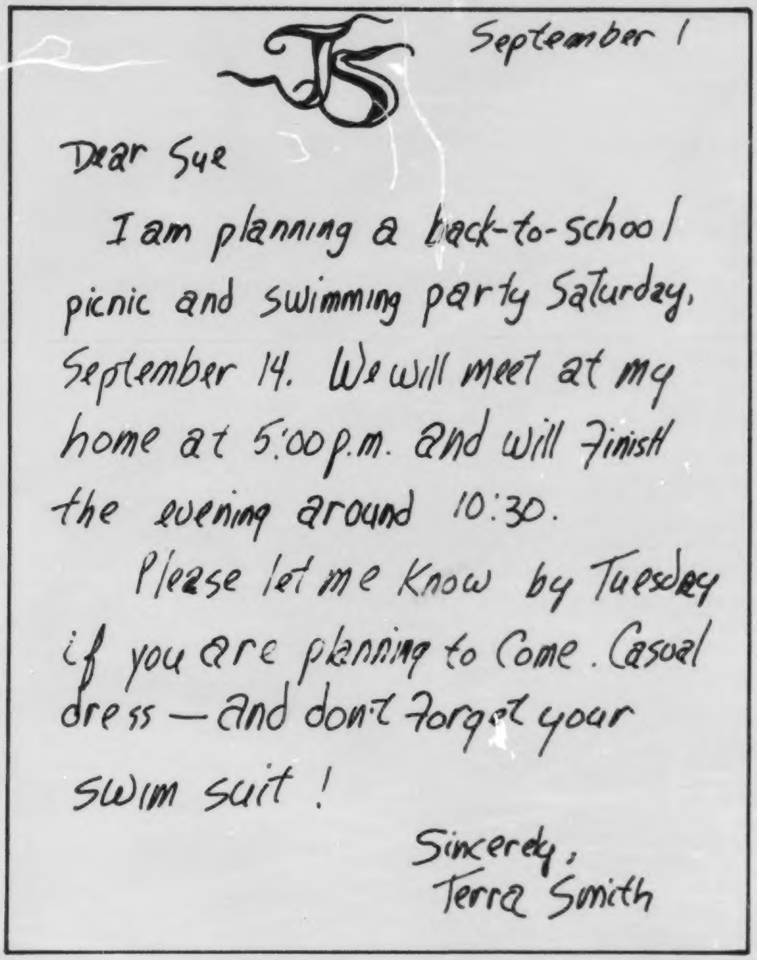
SOCIAL AND ENTERTAINMENT SKILLS
UNIT IV

ASSIGNMENT SHEET #1--PREPARE AN INVITATION

NAME ______________________ SCORE ____________

Invitations should be given to guests two to three weeks ahead of the event. Invitations can be spoken or written. Use guidelines in your unit and the example below as you prepare your own invitation.

(NOTE: Invitations are available in many forms. They may be hand-made or purchased. Special invitations can be engraved, but require a special order.)



TS September 1

Dear Sue

I am planning a back-to-school picnic and swimming party Saturday, September 14. We will meet at my home at 5:00 p.m. and will finish the evening around 10:30.

Please let me know by Tuesday if you are planning to come. Casual dress — and don't forget your swim suit!

Sincerely,
Terra Smith

SOCIAL AND ENTERTAINMENT SKILLS
UNIT IV

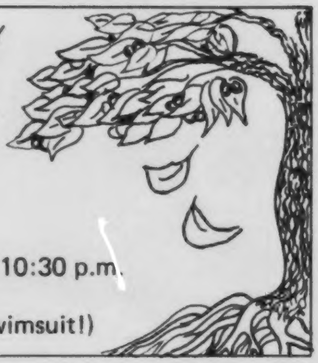
ASSIGNMENT SHEET #2--RESPOND TO AN INVITATION

NAME________________________________ SCORE______________

Whenever you are invited to attend a party, it is best to answer the invitation as soon as possible. Give your answer to the person who invited you. Repeating the date, time, and place is a good habit to develop. Be sure to express your pleasure at being invited whether or not you are able to attend the event.

Although many invitations are answered orally, it is best to plan your response. Write your response to the invitation below in the space provided. Use the back of this page if necessary.

Event: BACK TO SCHOOL PARTY
What: Cookout and Swimming
Who: Terra Smith
Where: 1515 W. 6th (My house)
When: September 14 from 5:00 to 10:30 p.m.
Dress: Casual (Don't forget your swimsuit!)



SOCIAL AND ENTERTAINMENT SKILLS
UNIT IV

ASSIGNMENT SHEET #3--PREPARE INTRODUCTIONS

NAME ______________________________ SCORE ______________

An important responsibility of a good host/hostess is to see that all of the guests know each other. Write what you would say in making the following introductions. Use rules in the unit to plan for making the following introductions.

1. Introduce Brenda Ayers to your father. ______________________________

____

____

____

2. Introduce Sue Pounds (age 18) to Ted Patton (age 18). ______________________________

____

____

____

3. Introduce your boyfriend/girlfriend to your minister. ______________________________

____

____

____

(NOTE: To avoid a blank silence after the introduction, you might add a few words designed to start a conversation. Maybe one of the persons has an interesting hobby, other special interest, or unusual experience. Mention it and the two will have something to start talking about. They will feel less self-conscious and your introduction will be more friendly. PRACTICE INTRODUCTIONS UNTIL YOU FEEL RELAXED AND AT EASE WHILE MAKING THEM!!!)

SOCIAL AND ENTERTAINMENT SKILLS
UNIT IV

ASSIGNMENT SHEET #4--PLAN MENUS FOR SPECIFIC SITUATIONS

NAME____ SCORE_________________

Foods selected to make up a menu for entertaining will depend on several factors. The type of occasion, time of day and year, number, ages, nutritional needs, preferences of people invited, budget, and time available for preparation are only a few!

Plan menus to serve for each of the following entertaining situations. Use unit information, cookbooks and other resources to help you do this assignment.

SITUATION A

You are planning a party to follow your first home football game. You need to plan food and drinks for 30 high school classmates. You are on a limited budget. You will only have thirty minutes after the game before hungry guests arrive.

1. What menu will you serve to guests?

2. Why did you make these food and drink selections?

ASSIGNMENT SHEET #4

3. How do you plan to serve these foods? Use the space below to make a drawing of how your serving table will be set up.

ASSIGNMENT SHEET #4

SITUATION B

You are on the FHA-HERO committee to organize a Christmas tea. Approximately fifty teachers and administrators are invited. The Christmas tea is a come-and-go event. Other home economics classes will help make the foods. The vocal classes will help with the entertainment.

1. What food and drinks will you serve to guests?

____

____

____

____

____

2. Why did you make these food and drink selections?

____

____

____

____

____

3. How do you plan to serve these foods? Make a drawing of how your serving table(s) will be set up in the space below, or attach drawing to this assignment sheet.

ASSIGNMENT SHEET #4

SITUATION C

You and your parents have invited your friend and her parents to your home for an evening dinner.

1. What menu will you serve?

2. Why did you plan this menu?

3. How will you serve these foods? Make a drawing of your dinner table, including a seating arrangement, tablesettings for each person, as well as serving dishes needed for each food. Use the space below, or attach your drawing to this assignment sheet.

ASSIGNMENT SHEET #4

SITUATION D

Your father has just called home at 3:00 to let you know that he is bringing his boss and his boss's wife home for dinner. Dinner should be served at 7:00. Your mother will not be home from work until 6:00. It is your job to plan and begin meal preparation. There will be four adults present for this meal.

1. What menu will you serve?

2. Why did you plan this menu?

3. How will you serve these foods? Make a drawing of your dinner table, including a seating arrangement, tablesettings for each person, as well as serving dishes needed for each food. Use the space below, or attach your drawing to this assignment sheet.

SOCIAL AND ENTERTAINMENT SKILLS
UNIT IV

ASSIGNMENT SHEET #5--CARRY OUT PLANS TO ENTERTAIN INFORMALLY

NAME ______________________ SCORE __________

Informal entertaining can be fun. Food and friends make a great combination for social get-togethers! Whether you are having a picnic, a barbeque or a wedding shower for a classmate, planning is necessary to make the event successful.

Decide the kind of informal entertainment event you wish to have. Plan your menu and select needed recipes. Use the time-work plan as you entertain informally. Be sure to attach recipes used to this assignment sheet.

PART I

1. The kind of informal entertainment event planned is ______________________

   (NOTE: This might reveal the theme or reason for entertaining!!)

2. The guest list includes ______________________

3. The date and time are ______________________

4. When will invitations be sent or given? ______________________

ASSIGNMENT SHEET #5

5. Sketch your plan for serving food in the space provided.

ASSIGNMENT SHEET #5

TIME-WORK PLAN

NAME ______________________________ SCORE ______________

KITCHEN ______________________________ NUMBER SERVED: ______

MENU

FOOD SUPPLIES NEEDED:

ASSIGNMENT SHEET #5

UTENSILS NEEDED FOR PREPARATION AND SERVING:

JOB TO BE DONE	TIME TABLE	TIME IN MINUTES
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

ASSIGNMENT SHEET #5

PART II

1. If carrying out plans to entertain informally again, what would you do differently?

____

____

2. What was the most difficult part of carrying out the plans to entertain informally?

____

____

3. If carrying out plans to entertain informally again, what would you do in the same way?

____

____

____

____

4. Would you use this plan again to entertain informally?______________

Explain your answer.______________________________

____

____

____

5. Attach a sketch or photo of the finished product.

SOCIAL AND ENTERTAINMENT SKILLS
UNIT IV

ASSIGNMENT SHEET #6--CARRY OUT PLANS TO ENTERTAIN FORMALLY

NAME ______________________________ SCORE ______________

Formal entertaining can be a real challenge!!! Planning a Christmas tea, a dinner for school board members, a wedding reception or an FHA-HERO banquet requires planning to make the event successful!

Decide the kind of formal entertainment event you wish to have. Plan your menu and select needed recipes. Use this and other unit information to complete the questions and time-work plan that follow. Use this time-work plan as you entertain formally. Be sure to attach recipes used to this assignment sheet.

PART I

1. The kind of formal entertainment event planned is ______________________________

   (NOTE: This might reveal the central theme or reason for entertaining.)

2. The guest list includes ______________________________

3. The date and time are ______________________________

4. When will invitations be sent or given? ______________________________

ASSIGNMENT SHEET #6

5. Sketch your plan for serving food in the space provided.

ASSIGNMENT SHEET #6

TIME-WORK PLAN

NAME______________________________ SCORE______________

KITCHEN____________________________ NUMBER SERVED:______

MENU

FOOD SUPPLIES NEEDED:

ASSIGNMENT SHEET #6

UTENSILS NEEDED FOR PREPARATION AND SERVING:

______________	______________
______________	______________
______________	______________
______________	______________
______________	______________
______________	______________

JOB TO BE DONE	TIME TABLE	TIME IN MINUTES
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

ASSIGNMENT SHEET #6

PART II

1. If carrying out plans to entertain formally again, what would you do differently?

____

____

2. What was the most difficult part of carrying out the plans to entertain formally?

____

____

3. If carrying out plans to entertain formally again, what would you do in the same way?

____

____

____

____

4. Would you use this plan again to entertain formally?______________

Explain your answer______________________________

____

____

____

5. Attach a sketch or photo of your finished product.

SOCIAL AND ENTERTAINMENT SKILLS
UNIT IV

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with entertainment skills to the correct definitions. Place the correct numbers in the blanks provided.

_____a. Formal presentation of one person to another

_____b. Percentage of bill given for good service

_____c. Letters standing for the French words, "Respondez s'il vous plait," meaning "Reply, please"

_____d. Acceptable social behavior

_____e. Written or oral message asking someone to attend a specific function

_____f. Manners established as acceptable or required in social situations

1. RSVP
2. Tipping
3. Invitation
4. Introduction
5. Manners
6. Etiquette

2. Match types of serving styles to the correct descriptions. Place the correct numbers in the blanks provided.

_____a. Food is served directly from the kitchen, with help as needed; diners are seated

_____b. Foods and accessories are set out on one table at which diners line up to serve themselves; diners seat themselves at another table where napkins and glasses are placed

_____c. Food is placed on the table; diners sit down and help themselves, or are served by the host/hostess, who remains seated

_____d. Combination of family style and continental style serving; soup, salad and dessert are served from kitchen and meat and other foods are served at the table

1. Family
2. Continental
3. Compromise
4. Buffet

3. State four reasons for entertaining.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

4. Arrange in order the steps in successful entertaining. Place a "1" in front of the first step, a "2" in front of the second step, and so on in the blanks provided.

_____a. Greet guests

_____b. Decide kind of event

_____c. Bid farewell to guests

_____d. Carry out entertainment plans

_____e. Set date and time

_____f. Get everything ready

_____g. Make a guest list

_____h. Send out invitations

_____i. Decide how to serve

_____j. Introduce guests

_____k. Mingle with guests

_____l. Develop time-work plan

_____m. Plan entertainment

_____n. Decide what to serve

5. Select from the following list information to include in an invitation. Mark each correct answer with an "X."

_____a. WHO is entertaining

_____b. WHAT to wear

_____c. WHY it is being held

_____d. WHERE it will be held

6. Discuss proper ways to respond to an invitation.

____

____

____

____

____

7. Select from the following list guidelines for making introductions. Mark each correct answer with an "X."

______a. Introduce females to males

______b. Introduce older persons to younger persons

______c. Introduce all individuals to clergy representatives

______d. Look at the person to whom you are speaking

8. Distinguish between responsibilities of guests and hosts/hostesses. Place a "G" before responsibilities of guests and an "H" before responsibilities of hosts/hostesses in the blanks provided.

______a. Respond to invitation promptly

______b. Get everything ready

______c. Arrive and leave on time

______d. Plan foods that will assist in meeting part of daily nutritional requirements

______e. Send out invitations two to four weeks in advance

______f. Express appreciation for invitation

______g. Make necessary introductions among guests

9. Select from the following list factors to consider in the selection of foods to serve when entertaining. Mark each correct answer with an "X."

______a. Type of occasion

______b. Time of day and year

______c. Budget of guests

______d. Number of people

______e. Nutritional value of foods

______f. Time available for preparation

10. State two rules for good table manners.

    a. ____

    ____

    b. ____

    ____

11. Select from the following list proper etiquette guidelines for eating in a restaurant. Mark each correct answer with an "X."

    _____a. Seat yourself when you arrive

    _____b. Appropriate tip should always be left for good service

    _____c. You should not linger at the table when finished

    _____d. Waiters and waitresses cannot make suggestions or answer questions

    _____e. Men may hold chairs for women; if there are no men in the party, the waiter or hostess may hold the chair

12. Prepare an invitation.

13. Respond to an invitation.

14. Prepare introductions.

15. Plan menus for specific situations.

16. Carry out plans to entertain informally.

17. Carry out plans to entertain formally.

(NOTE: If activities 12-17 have not been finished before the test, ask your instructor when they should be completed.)

SOCIAL AND ENTERTAINMENT SKILLS
UNIT IV

ANSWERS TO TEST

(NOTE: It may be helpful to use your blank test to make a test key. The point system in parentheses is intended to be a guideline and should be adapted to meet the needs of each teaching-learning process. The point total is 250.)

1. (12 points)
   a. 4
   b. 2
   c. 1
   d. 5
   e. 3
   f. 6
2. (8 points)
   a. 2
   b. 4
   c. 1
   d. 3
3. (8 points)

   Any four of the following:

   a. Provide enjoyment
   b. Celebrate holidays
   c. Repay hospitality extended
   d. Make business contacts
   e. Promote sales of products
   f. Celebrate special occasions

4. (28 points)

   a. 10

   b. 3

   c. 14

   d. 12

   e. 1

   f. 9

   g. 2

   h. 4

   i. 6

   j. 11

   k. 13

   l. 8

   m. 7

   n. 5

5. (8 points)

   a, b, c, d

6. (6 points)

   Discussion should include:

   a. Answer invitations as soon as possible

   b. Give answer directly to the person who invited you

   c. Repeat the date, time, and place to be sure that you have not made an error

   d. Express your pleasure at having been invited

7. (8 points)

   c, d

8. (14 points)

   a. G

   b. H

   c. G

   d. H

   e. H

   f. G

   g. H

9. (14 points)

   a, b, d, e, f

10. (4 points)

    Any two of the following:

    a. Observe host/hostess and follow his or her example

    b. Don't draw attention to yourself

    c. Think about the comfort of others

11. (10 points)

    b, c, e

12. Evaluated to the satisfaction of the instructor (15 points)

13. Evaluated to the satisfaction of the instructor (15 points)

14. Evaluated to the satisfaction of the instructor (10 points)

15. Evaluated to the satisfaction of the instructor (30 points)

16. Evaluated to the satisfaction of the instructor (30 points)

17. Evaluated to the satisfaction of the instructor (30 points)

CANNING
UNIT I

UNIT OBJECTIVE

After completion of this unit, the student should be able to can fruits and vegetables and make pickles and jelly. The student should also be able to compare costs of commercially and non-commercially canned products. This knowledge will be evidenced through completion of assignment sheets and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with canning to the correct definitions.
2. Discuss reasons for canning.
3. Select from a list factors to consider when selecting foods to be canned.
4. Label equipment used in canning.
5. Match canning equipment to the correct uses.
6. Label parts of a water-bath canner and a steam-pressure canner.
7. Match parts of the water-bath and steam-pressure canners to the correct functions.
8. Match common methods of canning to the correct uses.
9. Arrange in order steps in canning.
10. Describe the three tests for sealed lids.
11. Match types of food spoilage to the correct characteristics.
12. List ways to avoid canned food spoilage.
13. List characteristics of good storage areas for canned foods.
14. Select areas for storing canned foods.
15. Obtain prices of canning equipment.
16. Estimate quantity of jars and produce needed.
17. Compare costs of commercially and non-commercially canned products.

18. Prepare canned fruit.

19. Prepare canned vegetable.

20. Prepare pickles.

21. Prepare jelly.

CANNING
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide students with objective sheet.

   B. Provide students with information and assignment sheets.

   C. Discuss unit and specific objectives.

   D. Discuss information and assignment sheets.

   E. Adapt materials for special needs students.

   F. Invite resource person to speak about reasons for canning and advantages and disadvantages in growing produce to be used in canning to assist students in completing Assignment Sheet #4.

   G. Arrange field trip to local grocery store and have resource person discuss selection of produce to be canned.

   H. Have students visit houseware department of a local store to study and price equipment used in canning to assist in completion of Assignment Sheet #2.

   I. Discuss advantages and disadvantages of purchasing used canning equipment at garage sales, borrowing from friends or relatives, or obtaining through newspaper ads.

   J. Have students play Concentration to match equipment used in canning to the correct uses.

   K. Arrange for biology teacher to assist in growing cultures of spoiled foods and have student watch cultures develop as well as identify what is growing.

   L. Label areas in classroom and discuss possibilities for these areas as storage for canned goods.

   M. Invite resource person from local gardening center to discuss gardening procedures and costs.

   N. Introduce unit by serving a variety of home-canned and commercially canned produce and have students compare and evaluate quality of each.

   O. Allow students to complete Assignment Sheet #4 as a home experience.

   P. Demonstrate and provide opportunity for students to practice sealing with paraffin before sealing jelly. Fill jelly glasses with water leaving 1/2 inch head space. Pour hot paraffin on water so that it forms 1/8 inch seal.

Q. Encourage students to carry out additional canning projects as home experiences.

R. Prepare jelly as a class project to give as gifts to special resource people.

S. Supplment unit with information from "Kerr Home Canning and Freezing Book." This pamphlet can be ordered from Kerr Glass Manufacturing Corp., Consumer Products Division, Sand Springs, Oklahoma 74063.

T. Supplement unit with information from Ball Corporation. Pamphlets can be ordered for teacher and student use from Ball Corporation, Consumer Affairs Department WL, P.O. Box 2005, Muncie, Indiana 47302.

"Ball Blue Book"
"Some Aspects of Food Preservation"
"The Science of Food Preservation"
"Green Bean Snap"
"Tomato Twistin'"
"Jam Jamboree"
"Ball Home Canning Basics"
"Ready Reference Chart"
"Summer's Saucy Spreads"
"Gourmet Jams and Jellies"

U. Give test.

V. Reteach if necessary.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Assignment sheets

1. Assignment Sheet #1--Select Areas for Storing Canned Foods
2. Assignment Sheet #2--Obtain Prices of Canning Equipment
3. Assignment Sheet #3--Estimate Quantity of Jars and Produce Needed
4. Assignment Sheet #4–Compare Costs of Commercially and Non-Commercially Canned Products
5. Assignment Sheet #5--Prepare Canned Fruit
6. Assignment Sheet #6--Prepare Canned Vegetable
7. Assignment Sheet #7–Prepare Pickles
8. Assignment Sheet #8--Prepare Jelly

D. Answers to assignment sheets

E. Test

F. Answers to test

III. Unit references:

A. *Home Canning Tips.* Evansville, Indiana: Bernardin, Inc., n.d.

B. Yadrick, Kathleen. "Is Home Canning Safe?" *Family Living Topics.* T3404. Stillwater: Oklahoma State University, n.d.

C. Dunn, Charlotte M. *Using and Caring for Your Pressure Canner.* Food Resources and Human Nutrition. B2593. Madison: University of Wisconsin Cooperative Extension Programs, March, 1974.

D. Agricultural Research Service. *Making Pickles and Relishes at Home.* Home and Garden Bulletin Number 92. Washington, D.C.: United States Department of Agriculture, 1978.

E. *10 Short Lessons in Canning and Freezing.* Sand Springs, Oklahoma: Kerr Research and Educational Department, 1976.

F. Yadrick, Kathleen. *Home Canning.* C-3402. Stillwater: Oklahoma State University Extension, n.d.

G. "Successful Home Canning". Muncie, Indiana: Ball Corporation/Consumer Service Department, 1972.

H. "Blue Book." Muncie, Indiana: Ball Corporation, 1974.

I. Sowers, Mary Frances. "Pickles and Relishes." C-3304. Stillwater: Oklahoma State University Extension, n.d.

J. "Home Canning and Freezing Book." Sand Springs, Oklahoma: Kerr Research and Educational Department, 1974.

K. Sowers, Mary Frances. "Making Jams and Jellies." FL T3311. Stillwater: Oklahoma State University Extension, n.d.

L. "Perfect Jams and Jellies with Certo Fruit Pectin". White Plains, New York: General Foods Corporation, 1977.

M. Medved, Eva. *The World of Food.* Lexington, Massachusetts: Ginn and Company, 1970.

N. Kowtaluk, Helen, and Kopan, Alice Orphanos. *Food for Today.* Peoria, Illinois: Chas. A. Bennett Co., Inc., 1977.

O. *How to Make Jellies, Jams, and Preserves at Home.* Home and Garden Bulletin Number 56, rev. Washington D.C.: United States Department of Agriculture, 1977.

P. Yadrick, M. Kathleen. *Pickles and Relishes.* FL 63304 1178, rev. Stillwater: Oklahoma State University Extension, 1978.

CANNING
UNIT I

INFORMATION SHEET

I. Terms and definitions

A. Canning--Process of preserving food by using heat to destroy harmful micro-organisms by sealing the food in containers

B. Sterilization--Process of destroying bacteria, enzymes, yeasts, molds, and other substances that might cause food to spoil

C. Low-acid food--Vegetables, meats, and other foods not falling into acid food group that must be processed in a steam-pressure canner

D. High-acid food--Rhubarb, sauerkraut, tomatoes and other citrus fruits, and any pickled product that may be processed in a water-bath canner

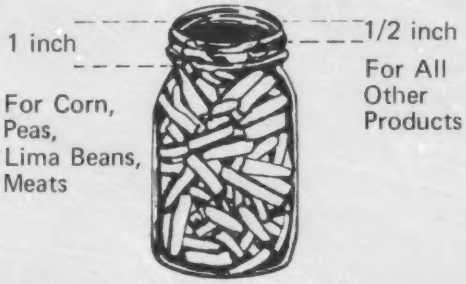
E. Pack--Manner in which food is placed into the jar

F. Cold pack--Method of preparing food for canning by filling the jar with raw food and liquid, and then processing it

G. Hot pack--Method of preparing food for canning by filling jars with hot food and liquid, and then processing it

H. Head space--Space left at the top of jar when filling or packing the jar with food

Example:



Used with permission of Kerr Glass Manufacturing Company.

I. Sealing--Making the jar air tight

(NOTE: The seal forms as the hot contents in the jar cool.)

J. Pectin--Substance found in fruits that thickens or jells when heated and combined with fruit acid and sugar

(NOTE: Commercial pectins are available for use with fruit juices low in pectin.)

K. Jelly--Fruit product made from cooking proper amounts of fruit juice, sugar, and pectin until desired consistency is reached

INFORMATION SHEET

L. Food spoilage--Growth of bacteria, mold, or yeast in canned foods, usually due to some failure in processing

(CAUTION: Never taste non-commercially canned meats or vegetables until they have been boiled; meats and corn for 20 minutes and other non-acid vegetables for 10 minutes. Never taste food that has an offensive or sour odor that you suspect is spoiled.)

M. Spore--Highly resistant, dormant form of bacteria

N. Paraffin seal--Fast, easy sealing method which involves no special canning equipment

II. Reasons for canning

A. Prevent produce from spoiling

B. Gain self-satisfaction

C. Obtain desired flavor

D. Carry on traditions established by others

E. Have access to foods during off season

F. Save time in meal preparation

(NOTE: Canned meats and vegetables take less time to prepare for serving than raw meats and vegetables.)

G. Save money

III. Factors to consider when selecting foods to be canned (Assignment Sheets #3 and #4)

A. Select foods that are at their peak in quality and flavor

(NOTE: Canning will not improve the quality of food, but will preserve it.)

B. Select fruit that is fully ripened, but still firm

(NOTE: Unripened fruit is not as sweet as fully ripened fruit because the flavor has not yet developed.)

C. Select small fruits that are not overripe, bruised, or sour

(NOTE: Soft or overripe fruits that are not soured can be used when making butters or jams.)

D. Select vegetables that are young, tender, and freshly gathered

(NOTE: Canning should take place as soon as possible after gathering to help hold good flavor as well as to prevent the growth of bacteria. The recommendation "two hours from garden to jar" is a good one to follow.)

INFORMATION SHEET

E. Select meat from a healthy animal

F. Select the proper quantity of raw produce according to the number of jars needed and amount of produce needed to fill each jar

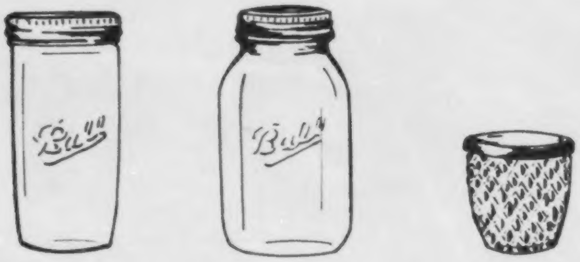
IV. Equipment used in canning (Assignment Sheet #2)

A. Jars

Examples: Wide mouth, regular, and jelly

(NOTE: Wide mouthed jars are commonly used for large fruits or other foods.)

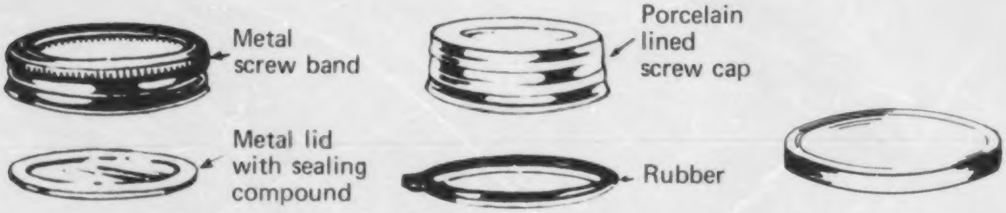
(CAUTION: Only standard canning jars, lids, and bands should be used when canning to insure proper lid sealing.)



Used with permission of the Ball Corporation.

B. Lids

Examples: Two-piece metal lid, one-piece metal lid with porcelain lining, jelly lid


Metal screw band
Porcelain lined screw cap
Metal lid with sealing compound
Rubber

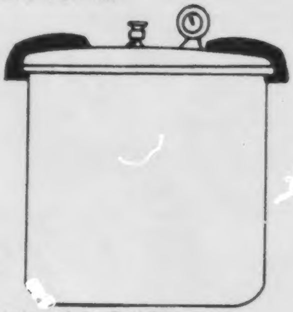
Two-piece metal lid

One-piece metal lid with porcelain lining

Jelly lid

INFORMATION SHEET

C. Steam pressure canner



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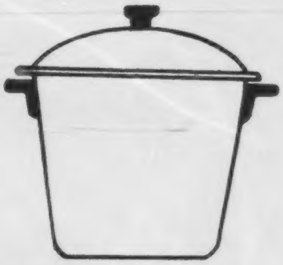
D. Water-bath canner



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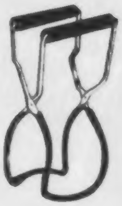
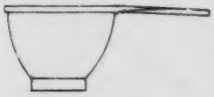
E. Jar lifter



INFORMATION SHEET

F. Funnel



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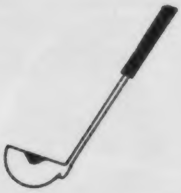
G. Ladle (with a lip)



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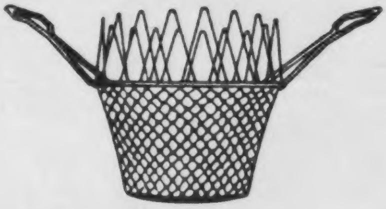
H. Wire basket



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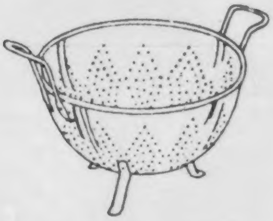
I. Colander



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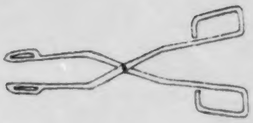
INFORMATION SHEET

J. Tongs



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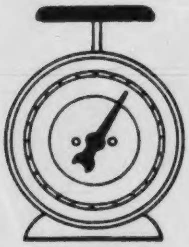
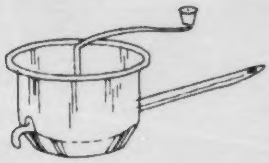
K. Household scale



Used with permission of the Ball Corporation.

L. Food mill



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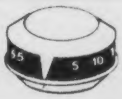
(NOTE: Other equipment may be substituted for this.)

M. Timer



INFORMATION SHEET

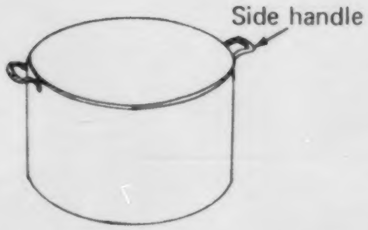
V. Canning equipment and their uses

- A. Steam-pressure canner--Processes canned foods under pressure at such a high degree of heat (240°F) that bacterial spores, which cause flat-sour, botulism, and other types of spoilage, are destroyed
- B. Water-bath canner--Processes canned foods in boiling water at such a high degree of heat (212°F) that bacteria, enzymes, molds, and yeasts, which cause spoilage in acid foods, are destroyed
- C. Wire basket--Holds vegetables or fruits as they are dipped into boiling water to remove skins or to blanch
- D. Food mill--Purees vegetables and fruits
- E. Jar--Stores and processes canned foods
- F. Lid--Seals processed jars of canned foods

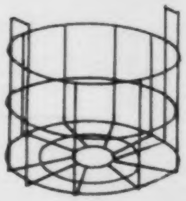
  (NOTE: When using jelly lids, it is necessary to seal the jelly with paraffin before putting on the lid; however, this method of canning is not recommended.)

VI. Parts of a water-bath canner and a steam-pressure canner

- A. Water-bath canner



Kettle

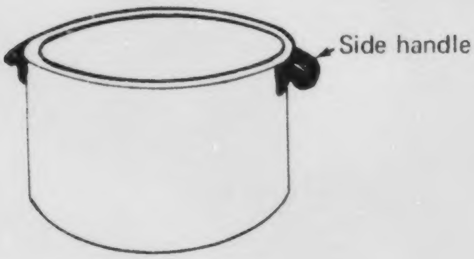


Rack

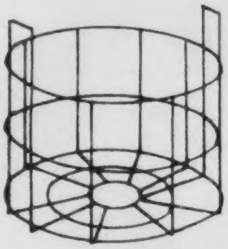
Cover

INFORMATION SHEET

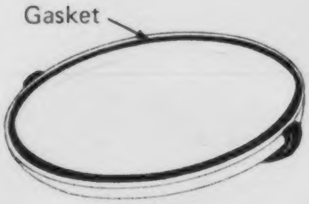
B. Steam-pressure canner

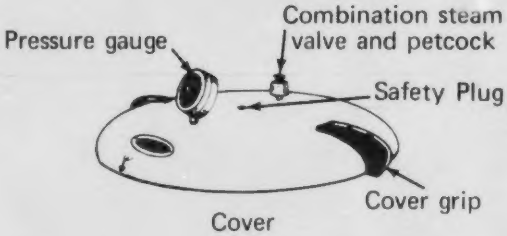


Kettle



Rack





Cover

VII. Functions of parts of the water-bath and steam-pressure canners

A. Kettle--Holds canned food, rack, and water during processing

B. Side handle--Provides for easy and safe moving of hot, full canner

C. Rack--Holds jars off bottom of kettle to prevent overheating during processing

D. Cover--Prevents heat from leaving kettle

E. Cover grip--Locks cover in place to prevent it from being lifted by steam during processing

F. Safety plug--Replaceable plug that melts or is blown out of canner lid if pressure or temperature becomes too high

G. Pressure gauge--Measures pressure in steam-pressure canner

(CAUTION: Dial must be checked before and during canning season if canner is used often; this insures that required processing temperature will be reached. County extension home economists provide this service.)

H. Combination steam valve and petcock--Controls pressure by allowing air/steam to be released from canner

I. Gasket--Replaceable rubber seal in cover rim that prevents air/steam leakage

INFORMATION SHEET

VIII. Uses of common methods of canning

A. Water bath--Recommended for use in canning fruits, pickles, relishes, and other high-acid foods

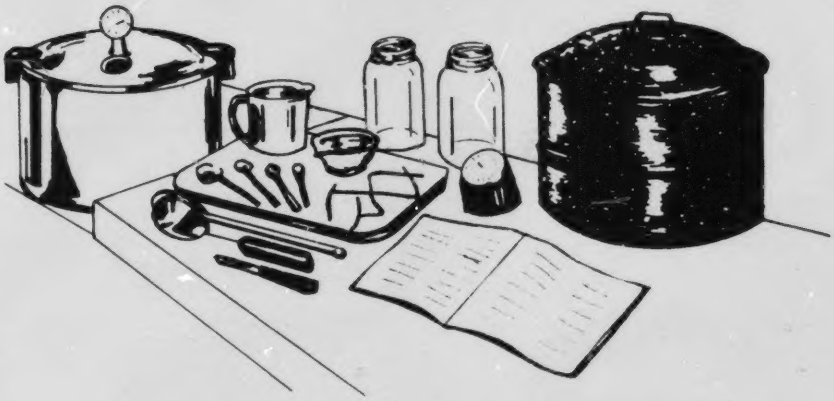
B. Steam pressure--Recommended for use in canning beans, beets, corn, meats, and other low-acid foods

C. Open kettle--Recommended for use in making jelly, only when paraffin is used as a seal

IX. Steps in canning (Assignment Sheets #5, #6, #7, and #8)

A. Assemble all equipment

Examples: Pressure canner for vegetables and meats; boiling water bath for fruits, tomatoes, jellies, preserves, pickles and relishes; jars and caps, jar lifter, funnel, measuring equipment and timer



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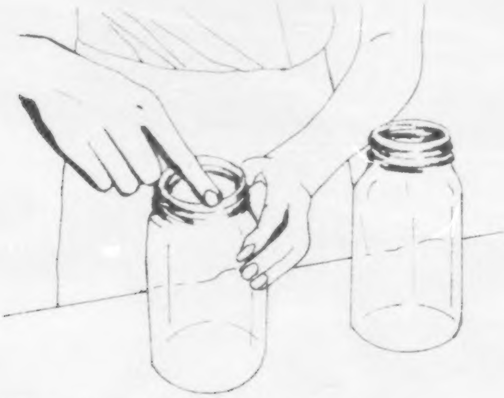
INFORMATION SHEET

B. Examine top of jars

(NOTE: There should not be any nicks, cracks or sharp edges on the jars.)



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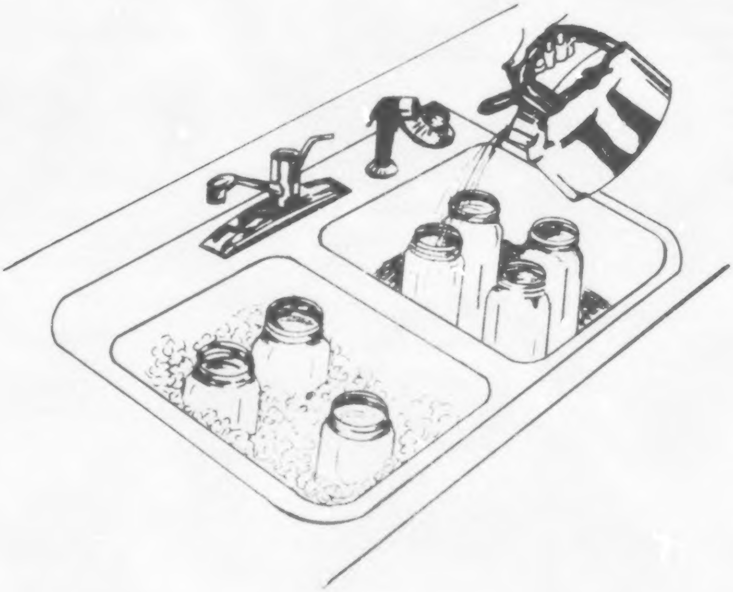
C. Wash jars well in hot soapy water

D. Rinse jars thoroughly



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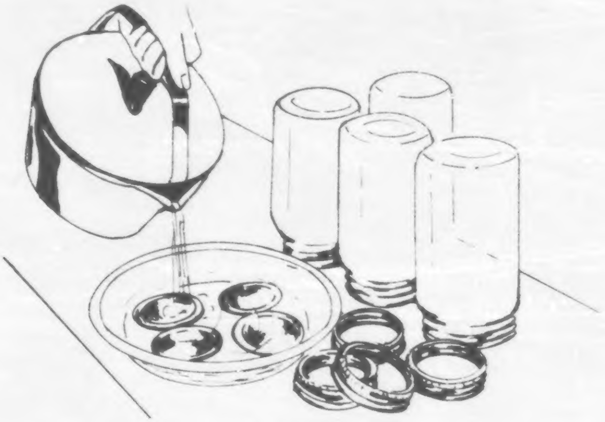
INFORMATION SHEET

E. Place lids in pan and pour boiling water over them

(NOTE: Lids should not boil, but should stay in water until ready to use.)



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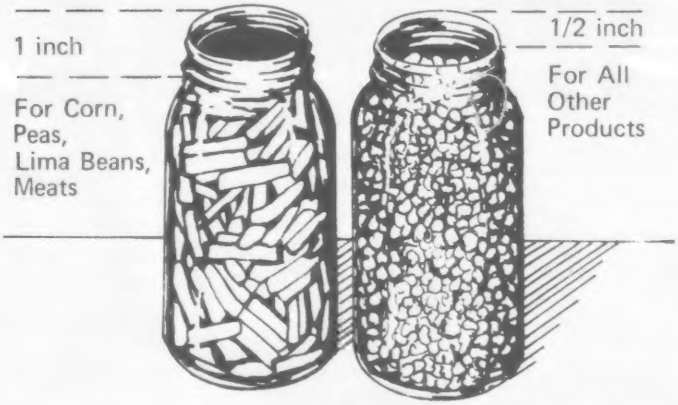
F. Pack food in jars

(NOTE: Corn, peas, lima beans and meats are packed to within 1 inch from top of jar. All other foods are packed to within 1/2 inch of top of jar.)


1 inch
For Corn, Peas, Lima Beans, Meats
1/2 inch
For All Other Products

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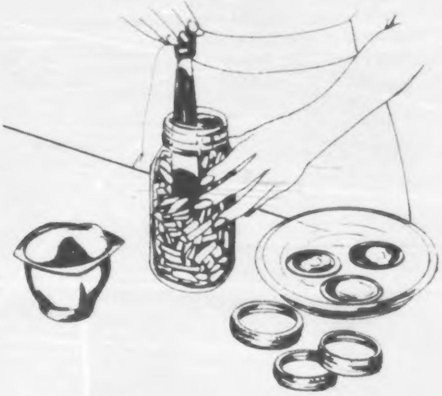
INFORMATION SHEET

G. Add boiling liquid according to recipe

H. Remove air bubbles from jar with spatula



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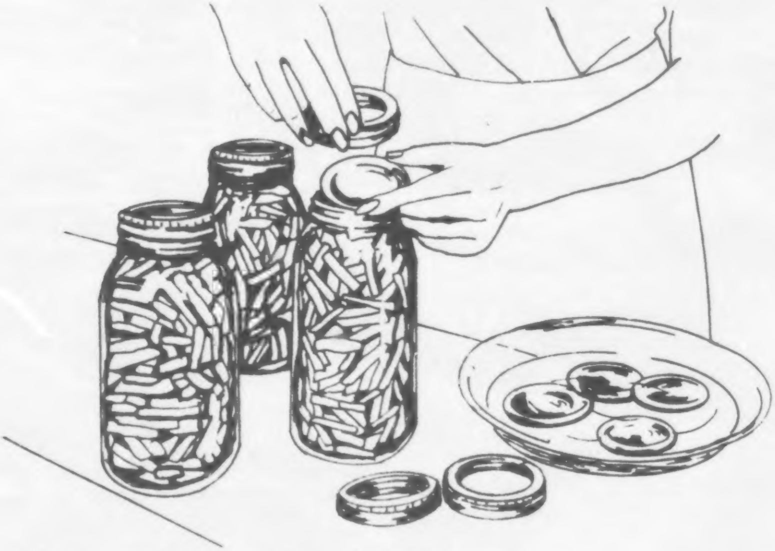
I. Wipe top of jar with clean, damp cloth

J. Place prepared lid on jar with sealing composition next to glass

(NOTE: Be sure to screw band firmly until tight.)



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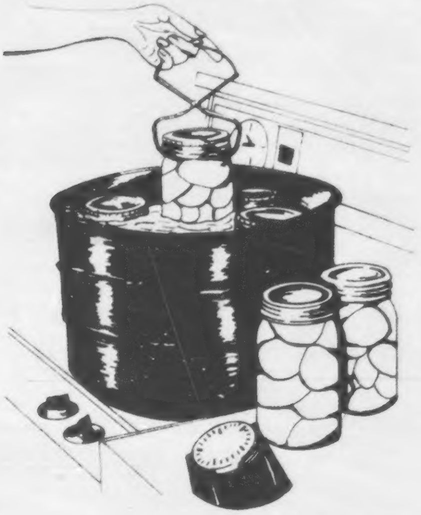
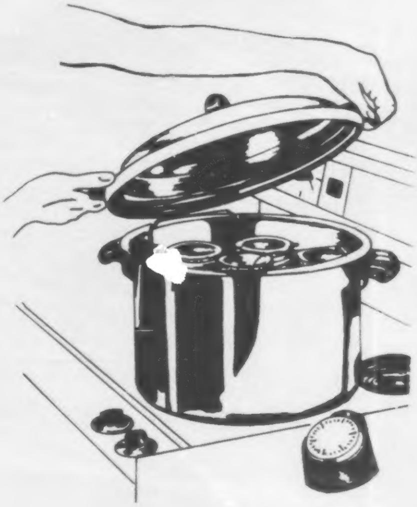
INFORMATION SHEET

K. Process in boiling water bath or pressure canner





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L. Place jars on rack or folded cloth to cool

(NOTE: Allow space between jars for air circulation. Do not set hot jars in a draft or cover them. Do not tighten screw bands.)

M. Test for sealed lids when jars are completely cold

N. Wash filled jars in warm, soapy water; rinse and dry

O. Store filled jars in a cool, dry place

X. Three tests for sealed lids

A. Hear the seal--As the lid snaps down while the jar is cooling, it will make a popping sound

B. See the seal--If the lid is curved down, the jar is sealed

C. Feel the seal--If the center of the lid will not move when pressed downward, the jar is sealed

XI. Types of food spoilage and their characteristics

A. Fermentation--Caused by yeast organism reacting with underprocessed fruit juices to produce bubbles of carbon dioxide; has an ethyl alcohol or beer-like smell

B. Flat sour--Caused by presence of spore-forming bacteria that develops in tomatoes, beans, peas, corn, pumpkin, and greens; develops very sour, unpleasant odor and usually appears very cloudy

INFORMATION SHEET

- C. Putrefaction--Caused by presence of spore-forming bacteria that develop in meats and vegetables that have been underprocessed; has a very foul odor that gets stronger with heating; feels soft and slimy, with gas bubbles present
- D. Botulism--Caused by clostridium botulinum, a spore forming bacteria commonly found in dirt, and affects low acid vegetables and meats; may have a rancid or rotten odor that is made stronger by heating; may feel slimy, liquid may be discolored, and gas may be present
- E. Mold--Caused by lack of cleanliness and underprocessing of fruits, jellies, vegetables, breads, and meat; appears as a fuzzy, grayish, or white growth on surface; may have a musty odor, or feel slimy

XII. Ways to avoid canned food spoilage

- A. Observe strict sanitation practices

  Examples: Use a clean cloth to wipe the jar tops before sealing; wash and rinse lids and jars before processing

  (NOTE: Lids and jars are sterilized during processing in the canners.)

- B. Follow directions carefully

  (NOTE: This not only includes equipment use, but also directions written for individual food processing.)

- C. Work quickly

  (NOTE: Bacteria grows quickly in open containers and foods should not be allowed to set before processing is complete.)

- D. Follow processing time accurately

XIII. Characteristics of good storage areas for canned goods (Assignment Sheet #1)

- A. Cool

  (NOTE: Temperature should be below 70°F [21°C] but not freezing. Warm storage temperatures may cause early discoloration, flavor changes, and nutrient loss.)

- B. Dry

  (NOTE: High humidity can corrode the lids making them difficult to open.)

- C. Dark

  (NOTE: Storing canned foods in light may cause foods to lose nutrients and flavor quickly.)

CANNING
UNIT I

ASSIGNMENT SHEET #1–SELECT AREAS FOR STORING CANNED FOODS

NAME______________________________________ SCORE__________________

Canning foods can be a very rewarding experience. However, if the canned foods are not stored properly all the work will be wasted. Improper storage can result in ruined products. Use the information sheet, class discussion, and resource material to complete the following assignment.

Place an "X" in front of those areas best suited for storing canned goods.

_____1. Under kitchen sink

_____2. In cellar

_____3. In basement

_____4. In garage on open shelf

_____5. In an unheated metal building in backyard

_____6. Near kitchen window on open shelf

_____7. In kitchen on shelves in pantry

_____8. In bathroom

CANNING
UNIT I

ASSIGNMENT SHEET #2–OBTAIN PRICES OF CANNING EQUIPMENT

NAME____________________________________ SCORE________________

Special equipment is required to complete canning procedures. This equipment can be borrowed or purchased from many different sources. Use catalogs or visit department stores in your area to obtain prices for the following canning equipment.

EQUIPMENT	UNIT PRICE
Wide mouth quart canning jars	
Lids to fit wide mouth quart jars	
Bands to fit wide mouth quart jars	
Steam-pressure canner	
Water-bath canner	
Jar lifter	
Wire basket	

If you were canning twelve quarts of produce and had to purchase all the equipment listed above what would your total cost be?

____

CANNING
UNIT I

ASSIGNMENT SHEET #3--ESTIMATE QUANTITY OF JARS AND PRODUCE NEEDED

NAME ______________________________ SCORE ______________

It is necessary to plan in advance of canning time to avoid wasting produce or overspending for jars. Decisions must be made to determine either how many jars are needed to can available produce or how many pounds of produce to purchase for the number of jars you want to can. This task is not always easy--even for the experienced canner. Use the following chart to complete this assignment.

RAW PRODUCE	MEASURE AND WEIGHT	APPROXIMATE NUMBER QUART JARS NEEDED	APPROXIMATE AMOUNT NEEDED FOR 1 QUART JAR
FRUITS			
Apples	1 bu. (48 lbs.)	16-20	2 1/2 to 3 lbs.
Applesauce	1 bu. (48 lbs.)	15-18	2 1/2 to 3 1/2 lbs.
Apricots	1 lug or 1 box (22 lbs)	7-11	2 to 2 1/2 lbs.
Berries	24 quart crate	12-18	1 1/2 to 3 lbs.
Cherries	1 bu. (56 lbs.)	22-32 (unpitted)	2 to 2 1/2 lbs.
	1 lug (22 lbs.)	9-11 (unpitted)	2 to 2 1/2 lbs.
Peaches	1 bu. (48 lbs.)	18-24	2 to 3 lbs.
	1 lug (22 lbs.)	8-12	2 to 3 lbs.
Pears	1 bu. (50 lbs.)	20-25	2 to 3 lbs.
	1 box (35 lbs.)	14-17	2 to 3 lbs.
Plums	1 bu. (56 lbs.)	24-30	1 1/2 to 2 1/2 lbs.
	1 lug (24 lbs.)	12	1 1/2 to 2 1/2 lbs.
Tomatoes	1 bu. (53 lbs.)	15-20	2 1/2 to 3 1/2 lbs.
	1 lug (30 lbs.)	10	2 1/2 to 3 1/2 lbs.
Tomatoes (for juice)	1 bu. (53 lbs.)	12-16	3 to 3 1/2 lbs.
VEGETABLES			
Beans, Lima (in pods)	1 bu. (32 lbs.)	6-10	3 to 5 lbs.
Beans, Green or Wax	1 bu. (30 lbs.)	12-20	1 1/2 to 2 1/2 lbs.
Beets (without tops)	1 bu. (52 lbs.)	15-24	2 to 3 1/2 lbs.
Carrots (without tops)	1 bu. (50 lbs.)	16-25	2 to 3 lbs.
Corn, Sweet (in husks)	1 bu. (35 lbs.)	6-10 (whole-kernel)	3 to 6 lbs.
Okra	1 bu. (26 lbs.)	16-18	1 1/2 lbs.
Peas, Green (in pods	1 bu. (30 lbs.)	5-10	3 to 6 lbs.
Spinach and other greens	1 bu. (18 lbs.)	3-8	2 to 6 lbs.
Squash, Summer	1 bu.(50 lbs.)	10-20	2 to 4 lbs.
Sweet Potatoes	1 bu.(50 lbs.)	16-25	2 to 3 lbs.

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ASSIGNMENT SHEET #3

1. How many quart jars will be needed to can the following amounts of produce?

   a. 1/2 bushel of apples--______________

   b. 1 bushel of cherries--______________

   c. 30 pounds of peaches--______________

   d. 15 pounds of green or wax beans--______________

   e. 18 pounds of sweet corn (in husk)--______________

2. How many pounds of produce will be needed to fill the following number of quart jars?

   a. 10 quarts of tomatoes--______________

   b. 5 quarts of apples--______________

   c. 6 quarts of peaches--______________

   d. 2 quarts of lima beans--______________

   e. 11 quarts of okra--______________

CANNING
UNIT I

ASSIGNMENT SHEET #4--COMPARE COSTS OF COMMERCIALLY AND NON-COMMERCIALLY CANNED PRODUCTS

NAME_______________________________________ SCORE________________

Consumers consider many factors in deciding whether to buy commercially prepared products or to preserve food at home. It is necessary to consider costs of produce, containers, equipment, fuel expense, and time to determine the true cost of preserving food. Assuming that you do not have to purchase any equipment, containers, or lids for canning, complete the chart below to compare the costs of purchasing commercially prepared and non-commercially prepared products. Assume that produce must be purchased.

Food	**Approximate amount of produce and staples needed per quart jar**	**Cost per quart (64 oz = 1 qt) to purchase commercially prepared products at the grocery store**	**Cost per quart to can with purchased produce**
Peaches	2-3 lbs peaches 1 cup sugar 2 cups water or fruit juice		
Green beans	1 1/2 to 2 lbs green beans 1 tsp salt		
Bread and butter pickles	5 cups medium-sized cucumbers, sliced 1/2 onion 1 clove of garlic 4 tsp. pure granulated salt 1 1/8 cup white sugar 3/8 tsp turmeric 3/8 tsp celery seed 1 1/2 tsp mustard seed 3/4 cup white vinegar		
Grape jelly	1 pint bottled grape juice 3 1/4 cups sugar 1/2 bottle or one pouch liquid pectin		

ASSIGNMENT SHEET #4

After completion of the assignment and price comparisons, answer the following questions.

1. Would it be more economical to purchase or can the following produce? Check the appropriate column.

Product	Purchase Commercially Prepared	Can with Purchased Produce
Peaches		
Green beans		
Bread and butter pickles		
Grape jelly		

2. Considering costs of produce, containers, equipment, fuel expenses as well as time used, would you choose to can or purchase these products next time?

____

Why? ____________________________________

____

____

____

CANNING
UNIT I

ASSIGNMENT SHEET #4--COMPARE COSTS OF COMMERCIALLY AND NON-COMMERCIALLY CANNED PRODUCTS

NAME ______________________ SCORE __________

Consumers consider many factors in deciding whether to buy commercially prepared products or to preserve food at home. It is necessary to consider costs of produce, containers, equipment, fuel expense, and time to determine the true cost of preserving food. Assuming that you do not have to purchase any equipment, containers, or lids for canning, complete the chart below to compare the costs of purchasing commercially prepared and non-commercially prepared products. Assume that produce must be purchased.

Food	**Approximate amount of produce and staples needed per quart jar**	**Cost per quart (64 oz = 1 qt) to purchase commercially prepared products at the grocery store**	**Cost per quart to can with purchased produce**
Peaches	2-3 lbs peaches 1 cup sugar 2 cups water or fruit juice		
Green beans	1 1/2 to 2 lbs green beans 1 tsp salt		
Bread and butter pickles	5 cups medium-sized cucumbers, sliced 1/2 onion 1 clove of garlic 4 tsp. pure granulated salt 1 1/8 cup white sugar 3/8 tsp turmeric 3/8 tsp celery seed 1 1/2 tsp mustard seed 3/4 cup white vinegar		
Grape jelly	1 pint bottled grape juice 3 1/4 cups sugar 1/2 bottle or one pouch liquid pectin		

ASSIGNMENT SHEET #4

After completion of the assignment and price comparisons, answer the following questions.

1. Would it be more economical to purchase or can the following produce? Check the appropriate column.

Product	Purchase Commercially Prepared	Can with Purchased Produce
Peaches		
Green beans		
Bread and butter pickles		
Grape jelly		

2. Considering costs of produce, containers, equipment, fuel expenses as well as time used, would you choose to can or purchase these products next time?

____

Why?______________________________

____

____

____

CANNING
UNIT I

ASSIGNMENT SHEET #5--PREPARE CANNED FRUIT

NAME ______________________________ SCORE ______________

Canning fruits in season may provide you with quality fruits throughout the year. Fruits may be canned by either the hot or cold pack method; then they are usually processed by the boiling water-bath method. Since fruits are acid foods, they may be processed safely at boiling temperatures.

Select a fruit to can. Study canning procedures for this fruit in canning and recipe books. Use the following space to copy your recipe and preparation instructions. Complete the time-work plan on the back of this assignment sheet and prepare the recipe according to instructions.

This Recipe is for ______________________________

Ingredients

______________	______________
______________	______________
______________	______________
______________	______________
______________	______________

Preparation Instructions: ______________________________

____

____

____

____

____

____

____

ASSIGNMENT SHEET #5

TIME-WORK PLAN

Name ______________________

Food to be Prepared: ______________________

Kitchen ______________________

Food Supplies Needed:

Utensils Needed:

	Order of Work	Time in Minutes
1.		
2.		
3.		
4.		
5.		
6.		
7.		

CANNING
UNIT I

ASSIGNMENT SHEET #6--PREPARE CANNED VEGETABLE

NAME ______________________________ SCORE ______________

Canning vegetables that are in season may provide you with quality vegetables throughout the year. Vegetables selected for canning should be young, tender, and fresh. Keep in mind that canning cannot improve appearance or flavor. Vegetables may be canned by either the hot or cold pack method. They are then processed in a pressure cooker.

Select a vegetable to can. Study canning procedures for this vegetable in canning and recipe books. Use the following space to copy your recipe and preparation instructions. Complete the time-work plan on the back of this assignment sheet and prepare the recipe according to instructions.

This Recipe is for ______________________________

Ingredients

Preparation Instructions: ______________________________

ASSIGNMENT SHEET #6

TIME-WORK PLAN

Name ____________________

Food to be Prepared: ____________________

Kitchen ____________________

Food Supplies Needed:

Utensils Needed:

	Order of Work	Time in Minutes
1.		
2.		
3.		
4.		
5.		
6.		
7.		

CANNING
UNIT I

ASSIGNMENT SHEET #7--PREPARE PICKLES

NAME____ SCORE__________________

Pickles refer not only to cucumbers, but to any vegetable, fruit, or meat prepared by by a pickling process. Pickles come in a variety of shapes, sizes, colors and flavors. The boiling water-bath canner is the processing method used and each pickle and relish recipe has individual processing requirements.

There are four basic pickle types:

BRINED PICKLES are vegetables, usually cucumbers, which are fermented or cured in a salt solution and various spices for about 3-6 weeks.

FRESH-PACK or QUICK-PROCESS PICKLES are vegetables soaked in a brine solution for several hours or canned in a spicy vinegar solution without brining.

RELISHES are fruits or vegetables which are chopped and cooked in a spicy vinegar solution.

FRUIT PICKLES are fruits simmered in a spicy sweet-sour syrup.

When completing pickling procedures do not use equipment or utensils made of zinc, iron, brass, copper, galvanized metal, or enamelware with chips or cracks. Be sure to fresh pack in glass, stainless steel or unchipped enamelware. It is also necessary to brine in crock, stone jar, unchipped enamel, glass or hardwood kegs with enamel, glass or paraffin lining plus a heavy lid.

Select a recipe for pickles. Use the following space to copy your recipe and preparation instructions. Complete the time-work plan that follows and prepare the recipe according to instructions.

ASSIGNMENT SHEET #7

This Recipe is for ________________________________

Ingredients

Preparation Instructions: ________________________________

FN - 35-D

ASSIGNMENT SHEET #7

TIME-WORK PLAN

Name ______________________________

Food to be Prepared: ______________________

Kitchen ______________________________

Food Supplies Needed:

Utensils Needed:

	Order of Work	Time in Minutes
1.		
2.		
3.		
4.		
5.		
6.		
7.		

CANNING
UNIT I

ASSIGNMENT SHEET #8--PREPARE JELLY

NAME______________________________ SCORE______________

The four main ingredients needed to make jelly are fruit or fruit juice, pectin, acid, and sugar. When gathering these ingredients together before you begin your project, keep in mind the following information:

FRUIT should be slightly underripe or just barely ripe

PECTIN causes jellies to set. It is present in varying amounts in all fruits but most recipes require additional commercial pectin. Liquid and powdered pectin may be used but may not be substituted for each other. Use the type of pectin called for in each recipe.

ACID adds flavor and helps with gel formation; lemon juice is usually used.

SUGAR is the preserving agent and also helps in gel formation.

There are three methods of preparation that you can use to prepare jelly:

OPEN KETTLE--Jelly is the only preserve which can safely be prepared by the open kettle method. The boiling hot jelly is prepared and poured immediately into sterilized hot jars and sealed with two-piece lids or paraffin. If paraffin is used, the jars are filled leaving 1/2 inch head space and covered immediately with a 1/8 inch layer of hot, but not smoking, paraffin.

BOILING WATER-BATH--Jams, preserves, conserves, marmalades and butters are semi-soft spreads which require boiling water bath processing for 5 to 15 minutes. Paraffin cannot be used.

FREEZER JAMS AND JELLIES--These are "no cook" jams and jellies prepared with commercial pectin. They may be stored in the freezer without processing.

ASSIGNMENT SHEET #8

Select a recipe for jelly. Use the following space to copy your recipe and preparation instructions. Complete the time-work plan in this assignment sheet and prepare the recipe according to instructions.

This Recipe is for ____________________

Ingredients

____________________ ____________________

____________________ ____________________

____________________ ____________________

____________________ ____________________

____________________ ____________________

Preparation Instructions: ____________________

____

____

____

____

____

____

____

FN - 39-D

ASSIGNMENT SHEET #8

TIME-WORK PLAN

Name ______________________________

Food to be Prepared: ______________________

Kitchen ______________________________

Food Supplies Needed:

Utensils Needed:

Order of Work	Time in Minutes
1.	
2.	
3.	
4.	
5.	
6.	
7.	

CANNING
UNIT I

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

2, 3, 7

Assignment Sheet #2

Answers will vary

Assignment Sheet #3

1. a. 8-10
   b. 22-32
   c. 10-15
   d. 610
   e. 3-6
2. a. 25-35
   b. 12 1/2 - 15
   c. 12-18
   d. 610
   e. 16 1/2

Assignment Sheet #4

Answers will vary

CANNING
UNIT I

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with canning to the correct definitions. Place the correct numbers in the blanks provided.

_____a. Fruit product made from cooking proper amounts of fruit juice, sugar, and pectin until desired consistency is reached

_____b. Method of preparing food for canning by filling the jar with raw food and liquid, and then processing it

_____c. Growth of bacteria, mold, or yeast in canned foods, usually due to some failure in processing

_____d. Process of preserving food by using heat to destroy harmful microorganisms by sealing the food in containers

_____e. Manner in which food is placed into the jar

_____f. Space left at the top of jar when filling or packing the jar with food

_____g. Rhubarb, sauerkraut, tomatoes and other citrus fruits, and any pickled product that may be processed in a water-bath canner

_____h. Substance found in fruits that thickens or jells when heated and combined with fruit acid and sugar

_____i. Process of destroying bacteria, enzymes, yeasts, molds, and other substances that might cause food to spoil

_____j. Vegetables, meats, and other foods not falling into acid food group that must be processed in a steam-pressure canner

_____k. Method of preparing food for canning by filling jars with hot food and liquid, and then processing it

_____l. Making the jar air tight

1. Pectin
2. Sterilization
3. Jelly
4. Hot pack
5. Canning
6. Food spoilage
7. Low-acid food
8. Sealing
9. Head space
10. Pack
11. High-acid food
12. Spore
13. Cold pack
14. Paraffin seal

______ m. Highly resistant, dormant form of bacteria

______ n. Fast, easy sealing method which involves no special canning equipment

2. Discuss reasons for canning.

3. Select from the list below factors to consider when selecting foods to be canned. Mark each correct answer with an "X."

______ a. Select meat from a healthy animal

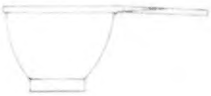
______ b. Select vegetables that have set for a couple of days

______ c. Select foods that are at their peak in quality and flavor

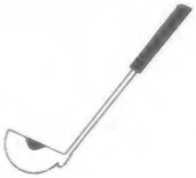
______ d. Select small fruits that are ripe, bruised, and sour

______ e. Select the proper quantity of raw produce according to the number of jars needed and amount of produce needed to fill each jar

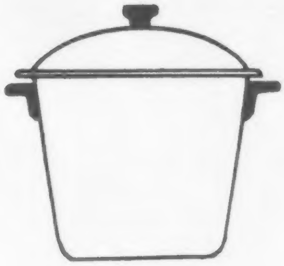
4. Label equipment used in canning. Write the correct names in the blanks provided.



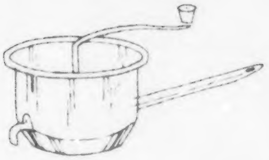
a. ______________________



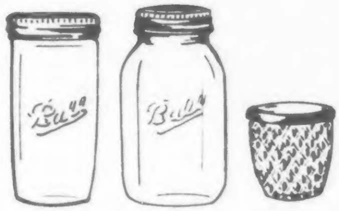
b. ______________________



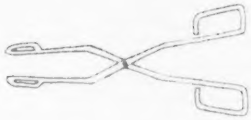
c. ____________________



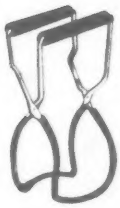
d. ____________________



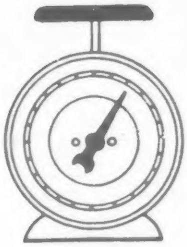
e. ____________________



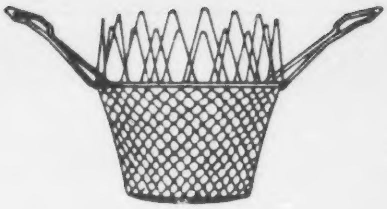
f. ____________________



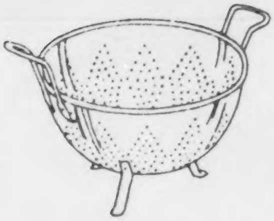
g. ____________________



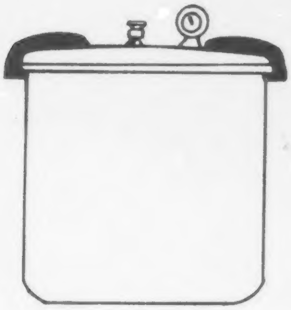
h. ____________________



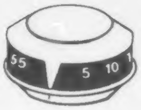
i. ____________________



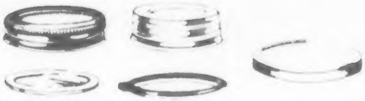
j. ____________________



k. ____________________



l. ____________________



m. ____________________

5. Match canning equipment to the correct uses. Place the correct numbers in the blanks provided.

______a. Holds vegetables or fruits as they are dipped into boiling water to remove skins or to blanch

______b. Seals processed jars of canned foods

______c. Processes canned foods under pressure at such a high degree of heat (240°F) that bacterial spores, which cause flat-sour, botulism, and other types of spoilage, are destroyed

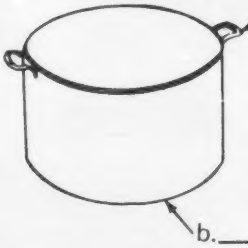
______d. Purées vegetables and fruits

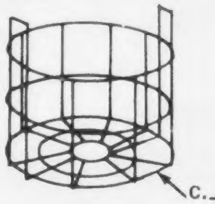
______e. Processes canned foods in boiling water at such a high degree of heat (212°F) that bacteria, enzymes, molds, and yeasts, which cause spoilage in acid foods, are destroyed

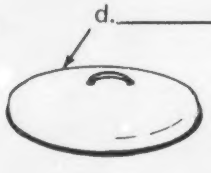
______f. Stores and processes canned foods

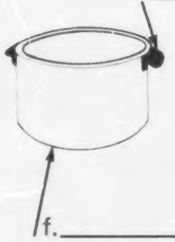
1. Lid
2. Water-bath canner
3. Jar
4. Wire basket
5. Food mill
6. Steam-pressure canner

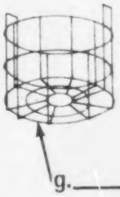
6. Label parts of a water-bath canner and a steam-pressure canner. Write the correct names in the blanks provided.

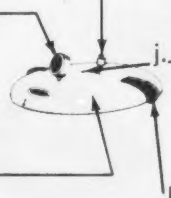


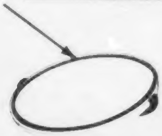












7. Match the parts of the water-bath and steam-pressure canners to the correct functions. Place the correct numbers in the blanks provided.

_____a. Measures pressure in steam-pressure canner

_____b. Holds canned food, rack, and water during processing

_____c. Replaceable rubber seal in cover rim that prevents air/steam leakage

_____d. Controls pressure by allowing air/steam to be released from canner

_____e. Prevents heat from leaving kettle

_____f. Provides for easy and safe moving of hot, full canner

_____g. Replaceable plug that melts or is blown out of canner lid if pressure or temperature becomes too high

_____h. Holds jars off bottom of kettle to prevent overheating during processing

_____i. Locks cover in place to prevent it from being lifted by steam during processing

1. Kettle
2. Gasket
3. Pressure gauge
4. Combination steam valve and petcock
5. Cover grip
6. Rack
7. Side handle
8. Cover
9. Safety plug

8. Match common methods of canning to the correct uses. Place the correct numbers in the blanks provided.

_____a. Recommended for use in canning beans, beets, corn, meats, and other low-acid foods

_____b. Recommended for use in making jelly, only when paraffin is used as a seal

_____c. Recommended for use in canning fruits, pickles, relishes, and other high-acid foods

1. Water-bath
2. Open kettle
3. Steam pressure

9. Arrange in order steps in canning. Place a "1" in front of the first step, a "2" in front of the second step, and so on, until complete.

_____a. Wash filled jars in warm, soapy water; rinse and dry

_____b. Pack food in jars

_____c. Examine top of jars

_____d. Wipe top of jar with clean, damp cloth

_____e. Assemble all equipment

_____f. Remove air bubbles from jar with spatula ______g. Store filled jars in a cool, dry place

______h. Place lids in pan and pour boiling water over them

______i. Rinse jars thoroughly

______j. Process in boiling water bath or pressure canner

______k. Test for sealed lids when jars are completely cold

______l. Wash jars well in hot soapy water

______m. Place prepared lid on jar with sealing composition next to glass

______n. Place jars on rack or folded cloth to cool

______o. Add boiling liquid according to recipe

10. Describe the three tests for sealed lids.

____

____

____

____

____

11. Match types of food spoilage to the correct characteristics. Place the correct numbers in the blanks provided.

______a. Caused by lack of cleanliness and under-processing of fruits, jellies, vegetables, breads, and meat; appears as a fuzzy, grayish, or white growth on surface; may have a musty odor or feel slimy

______b. Caused by yeast organism reacting with underprocessed fruit juices to produce bubbles of carbon dioxide; has an ethyl alcohol or beer-like smell

______c. Caused by clostridium botulinum, a spore-forming bacteria commonly found in dirt, and affects low acid vegetables and meats; may have a rancid or rotten odor that is made stronger by heating; may feel slimy, liquid may be discolored, and gas may be present

1. Fermentation
2. Mold
3. Botulism
4. Putrefaction
5. Flat sour

_____d. Caused by presence of spore-forming bacteria that develop in tomatoes, beans, peas, corn, pumpkin, and greens; develops very sour, unpleasant odor and usually appears very cloudy

_____e. Caused by presence of spore-forming bacteria that develop in meats and vegetables that have been underprocessed; has a very foul odor that gets stronger with heating; feels soft and slimy with gas bubbles present

12. List two ways to avoid canned food spoilage.

    a. ____

    b. ____

13. List two characteristics of good storage areas for canned foods.

    a. ____

    b. ____

14. Select areas for storing canned foods.

15. Obtain prices of canning equipment.

16. Estimate quantity of jars and produce needed.

17. Compare costs of commercially and non-commercially canned products.

18. Prepare canned fruit.

19. Prepare canned vegetable.

20. Prepare pickles.

21. Prepare jelly.

(NOTE: If activities 14-21 have not been finished before the test, ask the instructor when they should be completed.)

CANNING
UNIT I

ANSWERS TO TEST

(NOTE: It may be helpful to use your blank test to make a test key. The point system designated in parentheses is intended to be a guideline and should be adapted to meet the needs of each teaching-learning process. The point total is 300.)

1. (28 points)
   - a. 3
   - b. 13
   - c. 6
   - d. 5
   - e. 10
   - f. 9
   - g. 11
   - h. 1
   - i. 2
   - j. 7
   - k. 4
   - l. 8
   - m. 12
   - n. 14
2. (5 points)

   Discussion should include:
   - a. Prevent produce from spoiling
   - b. Gain self-satisfaction
   - c. Obtain desired flavor
   - d. Carry on traditions established by others
   - e. Have access to foods during off season
   - f. Save time in meal preparation
   - g. Save money

3. (10 points)

   a, c, e,

4. (26 points)

   a. Funnel
   b. Ladle
   c. Water-bath canner
   d. Food mill
   e. Jars
   f. Tongs
   g. Jar lifter
   h. Household scale
   i. Wire basket
   j. Colander
   k. Steam-pressure canner
   l. Timer
   m. Lids

5. (12 points)

   a. 4
   b. 1
   c. 6
   d. 5
   e. 2
   f. 3

6. (26 points)

   a. Side handle
   b. Kettle
   c. Rack
   d. Cover

e. Side handle

f. Kettle

g. Rack

h. Pressure gauge

i. Combination steam valve and petcock

j. Safety plug

k. Cover grip

l. Cover

m. Gasket

7. (18 points)

a. 3

b. 1

c. 2

d. 4

e. 8

f. 7

g. 9

h. 6

i. 5

8. (6 points)

a. 3

b. 2

c. 1

9. (30 points)

a. 14

b. 6

c. 2

d. 9

e. 1

f. 8

g. 15

h. 5

i. 4

j. 11

k. 13

l. 3

m. 10

n. 12

o. 7

10. (5 points)

    Description should include:

    a. Hear the seal--As the lid snaps down while the jar is cooling, it will make a popping sound

    b. See the seal--If the lid is curved down, the jar is sealed

    c. Feel the seal If the center of the lid will not move when pressed downward, the jar is sealed

11. (10 points)

    a. 2

    b. 1

    c. 3

    d. 5

    e. 4

12. (2 points)

    Any two of the following:

    a. Observe strict sanitation practices

    b. Follow directions carefully

    c. Work quickly

    d. Watch processing time accurately

13. (2 points)

    Any two of the following:

    a. Cool

    b. Dry

    c. Dark

14. Evaluated to the satisfaction of the instructor (10 points)

15. Evaluated to the satisfaction of the instructor (10 points)

16. Evaluated to the satisfaction of the instructor (10 points)

17. Evaluated to the satisfaction of the instructor (10 points)

18. Evaluated to the satisfaction of the instructor (20 points)

19. Evaluated to the satisfaction of the instructor (20 points)
20. Evaluated to the satisfaction of the instructor (20 points)
21. Evaluated to the satisfaction of the instructor (20 points)

FREEZING AND DRYING
UNIT II

UNIT OBJECTIVE

After completion of this unit, the student should be able to freeze and dry foods economically. This knowledge will be evidenced through completion of assignment sheets, job sheet, and unit test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Match terms associated with freezing and drying to the correct definitions.
2. Discuss reasons for freezing food.
3. State advantages of freezing food.
4. Select from a list factors to consider when selecting foods to be frozen or dried.
5. State reasons proper packaging is important in freezing.
6. State factors to consider in purchasing containers and wrapping materials used in home freezing.
7. Complete a chart on types of containers and wrapping materials used in home freezing.
8. Select from a list rules for storing food in the freezer.
9. Discuss factors to consider in the selection of a freezer.
10. Select from a list correct methods of thawing frozen foods.
11. State methods used to prepare frozen foods for serving.
12. Discuss reasons for drying foods.
13. State methods for drying foods.
14. Select from a list those factors to consider in packaging and storing dried foods.
15. Describe methods used in preparing dried foods for use.
16. Classify foods according to correct types of containers and wrapping materials used in home freezing.
17. Compare costs of containers and wrapping materials used in home freezing.
18. Compare freezer storage costs.

19. Classify frozen foods according to the correct methods used to prepare them for serving.

20. Compare costs of frozen products.

21. Freeze fresh fruit.

22. Freeze fresh vegetables.

23. Dry fruit.

24. Dry meat.

25. Demonstrate the ability to wrap meat to be frozen.

FREEZING AND DRYING
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities for instructor:

   A. Provide students with objective sheet.

   B. Provide students with information, assignment, and job sheets.

   C. Discuss unit and specific objectives.

   D. Discuss information and assignment sheets.

   E. Demonstrate and discuss procedures outlined in the job sheets.

   F. Develop appropriate learning activities for special needs students.

   G. Invite resource person to speak on reasons for and advantages of freezing.

   H. Arrange for display of containers and wrapping materials (including prices) used in storing frozen foods.

   I. Introduce unit by serving a variety of home frozen foods and commercially frozen foods as well as a variety of home dried foods and commercially dried foods. Have students compare prices and quality of each.

   J. Arrange for field trip to local grocery store to have produce manager talk about selecting produce to be frozen or dried.

   K. Allow students to visit local appliance store and commercial locker plant to complete Assignment Sheet #3 as a home experience.

   L. Arrange for field trip to store carrying a large selection of frozen and dried foods. Lead class discussion after trip to brainstorm ideas on how to prepare foods that were seen in the store.

   M. Encourage students to construct a home dryer for a home experience.

   N. Supplement unit with information from *Kerr Home Canning and Freezing Book*. This pamphlet can be ordered from:

      Kerr Glass Manufacturing Corp.
      Consumer Products Division
      Sand Springs, Oklahoma 74063

O. Supplement unit with information from Ball Corporation. Pamphlets can be ordered for teacher and student use from:

Ball Corporation
Consumer Affairs Dept. WL
P.O. Box 2005
Muncie, Indiana 47302

1. "Ball Blue Book"
2. "Ball Freezer Book"
3. "Some Aspects of Food Preservation"
4. "The Science of Food Preservation"

P. Supplement unit with filmstrips and cassettes available also from Ball Corporation. They can be ordered as a set or individually. Subject titles are:

1. "Freezing Fruits"
2. "Freezing Vegetables"
3. "Canning Green Beans"
4. "Canning Tomatoes"
5. "Preparing Dill Pickles"
6. "Jelly Making"

Q. Encourage students to carry out additional freezing and drying projects for home experiences.

R. Have students complete Assignment Sheet #5 after completing job sheet.

S. Give test.

T. Reteach if necessary.

II. Instructional materials:

A. Objective sheet

B. Information sheet

C. Assignment sheets

1. Assignment Sheet #1--Classify Foods According to Correct Types of Containers and Wrapping Materials Used in Home Freezing
2. Assignment Sheet #2--Compare Costs of Containers and Wrapping Materials Used in Home Freezing

3. Assignment Sheet #3--Compare Freezer Storage Costs
4. Assignment Sheet #4--Classify Frozen Foods According to Correct Methods Used to Prepare them for Serving
5. Assignment Sheet #5--Compare Costs of Frozen Products
6. Assignment Sheet #6--Freeze Fresh Fruit
7. Assignment Sheet #7--Freeze Fresh Vegetables
8. Assignment Sheet #8--Dry Fruit
9. Assignment Sheet #9--Dry Meat

D. Answers to assignment sheets

E. Job Sheet #1--Wrap Meat to be Frozen

F. Test

G. Answers to test

III. Unit references:

A. *Blue Book: Easy Guide to Tasty, Thrifty Canning and Freezing*. Muncie, Indiana: Ball Corp., n.d.

B. *Freezer Book*. Muncie, Indiana: Ball Corp./Consumer Products Div., 1974.

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I. *10 Short Lessons in Canning and Freezing*. Sand Springs, Oklahoma: Kerr Glass Manufacturing Corp./Research and Educational Dept., 1976.

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N. *Food Freezing Facts*. Chicago: Morton Salt Co./Division of Morton International, Inc., n.d.

O. *Home Freezing*. Stillwater: Oklahoma State University Extension and U.S. Department of Agriculture, n.d.

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Q. Shank, Dorothy E. et al. *Guide to Modern Meals*. 2nd ed. Webster Div./McGraw-Hill Book Co., 1970.

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FREEZING AND DRYING
UNIT II

INFORMATION SHEET

I. Terms and definitions

A. Freezing--Method of preserving food at a temperature of 0°F or below

B. Blanching--Boiling food in water for a few minutes and then dipping in cold water to prevent spoilage

C. Syrup blanching--Boiling fruits in sugar-water solution

D. Steam blanching--Process in which vegetables or fruits are placed in colander or other container and placed in a kettle with small amount of boiling water

E. Freezer burn--Drying out of foods caused by exposure to very dry, cold air

F. Proper packaging--Moisture-proof or vapor-proof container or wrapping material used for freezing food

G. Head space--Empty space left at top of the jar or container in which food is packed

H. Cubic foot--Measurement describing the volume of a cube one foot high, one foot wide, and one foot deep

I. Moisture-proof/vapor-proof--Characteristics necessary for freezer containers and wrapping materials in order to keep moisture and flavor in while keeping air and odors out

J. Drying--Process of removing moisture from food so that microorganisms will not grow

K. Sulfuring--Pretreating fruits with flowers of sulfur or sublimed sulfur before drying

(NOTE: The outdoor process involves burning appropriate amounts of sulfur near fruit.)

L. Dehydration--Removal of liquid from food by natural or artificial means

II. Reasons for freezing food (Assignment Sheets #6 and #7)

A. To prevent produce from spoiling

(NOTE: Unlike canning, freezing does not kill the organisms that cause spoilage, it merely stops their growth temporarily.)

INFORMATION SHEET

B. To gain self-satisfaction

C. To retain fresh food color, flavor, and nutrients that would be lost through use of other methods of food preservation

D. To have access to foods that are out of season

E. To save time in meal preparation

(NOTE: Entire meals can be frozen and then defrosted and heated for serving.)

F. To carry on traditions

G. To take advantage of freezer storage space

III. Advantages of freezing food (Assignment Sheet #5)

A. Retains fresh food color, flavor, and nutritional value better than other methods of food preservation

B. Is easy to complete freezing procedures

C. Is less time-consuming than other food preservation methods

D. No special equipment is needed to process foods

IV. Factors to consider when selecting foods to be frozen or dried

A. Select high quality, fresh products

(NOTE: Freezing and drying retains but does not improve quality.)

B. Select ripe fruits and vegetables that are vine- or tree-ripened when possible

(NOTE: Underripe fruits and vegetables lack flavor while overripe fruits and vegetables are flat and tough or soft and mushy after freezing. Select fruits and vegetables that are vine- or tree-ripened whenever possible. Fruits and vegetables uniform in size and shape are best for freezing; overmature, soft, or bruised foods are not satisfactory.)

C. Select meats and poultry that have been chilled quickly after killing

(NOTE: Beef must be aged for about a week at 33°F to 38°F to become tender and flavorful.)

D. Select prepared foods for freezing, baked or unbaked, that will retain shape and texture

(NOTE: Refer to specific information on freezing prepared foods to determine what foods freeze best.)

INFORMATION SHEET

V. Reasons proper packaging is important in freezing

- A. To prevent chemical changes of food caused by exposure to air

  Examples: Color loss, "off" flavor, odor absorption, vitamin loss

- B. To prevent physical changes caused by loss of moisture

  Examples: Weight loss, change in appearance

- C. To prevent formation of ice crystals

  (NOTE: Fresh fruits and vegetables must be placed in small enough containers so they will be frozen quickly after processing.)

VI. Factors to consider in purchasing containers or wrapping materials used in home freezing (Job Sheet #1)

- A. Food to be frozen

  (NOTE: Size, shape, and weight of food will affect purchase.)

- B. Durability of container or wrapping material

  (NOTE: Heavy foods, such as turkey, or foods with sharp places, such as fish, will require containers or wrapping material that will not puncture or tear easily.)

- C. Space available for storing frozen food

  (NOTE: Flexible containers take up less space than rigid containers and can conform to fit space.)

- D. Cost of containers and wrapping materials

- E. Reusability of packaging materials

- F. Design of containers and wrapping materials

  (NOTE: Containers should be easy to fill, stacked in the freezer with no lost space, and should permit easy removal of food.)

INFORMATION SHEET

VII. Types of containers and wrapping materials used in home freezing (Assignment Sheets #1 and #2)

Type of Containers or Wrapping Materials	Examples	Recommended Uses	Some Foods Which Can be Stored
Rigid Containers	Glass canning jars Freezer jars Plastic freezer boxes Waxed boxes	Used in packaging most foods but are recommended for all foods that are soft or fluid at room temperature	Fruits packed in syrup or sugar, butter, stews, creamed foods, meats with gravy
Flexible containers	Plastic bags	Used in packing meat and other products with irregular shapes as well as vegetables and fruits packaged without syrup or added sugar	Birds, fish, grapes, raspberries, blueberries, eggs that have been frozen in and removed from ice trays
Wrapping materials	Plastic wrap Foil wrap Plastic-coated paper wrap	Used in packaging meat that is freshly processed or to repackage purchased meat	Chicken pieces, hamburger, fish pieces, porkchops

VIII. Rules for storing food in the freezer

A. Label and date all foods to be stored in freezer

B. Use frozen foods within recommended storage time

C. Store like foods together

D. Place most recently frozen foods at bottom or back of freezer

(NOTE: Move foods that have been in the freezer storage longer toward the top or front.)

E. Replace foods used from the freezer with others for economical use of freezer space

F. Keep a record of frozen foods that are in storage; update as foods are put in or taken out

INFORMATION SHEET

IX. Factors to consider in the selection of a freezer (Assignment Sheet #3)

A. Amount of space available

(NOTE: A mobile home or apartment might have room for a side by side refrigerator/freezer, but would probably not have room for a chest freezer. A home freezer should be placed in the most convenient, coolest, driest, best-ventilated place possible.)

B. Storage capacity

(NOTE: Compute average freezer storage needs by multiplying 2 1/2 cubic feet of storage space by the number of family members minus cubic feet of freezer space in refrigerator.)

C. Usefulness of special features

Examples: Adjustable shelves, trays, storage in door, interior lighting, automatic defrost, and built-in lock

D. Cost of purchasing

(NOTE: It is a good idea to compare prices per cubic foot of storage space among different brands with different features to determine the best buy.)

E. Cost of operating

(NOTE: It costs less to operate a full freezer than an empty or half-full freezer.)

F. Guarantee and warranty

(NOTE: A guarantee is an expressed or implied assurance for specific performance of a product. A warranty is a written guarantee for specific performance of a product.)

G. Service available

(NOTE: It may not be possible to locate someone to repair the freezer.)

H. Care required

(NOTE: It is recommended that most freezers be defrosted and cleaned once a year.)

X. Correct methods of thawing frozen food

A. Defrost frozen foods in refrigerator if time allows

B. Use defrost cycle of microwave oven

(CAUTION: Follow manufacturer's instructions for defrosting individual food items.)

INFORMATION SHEET

C. Thaw fruits in the refrigerator, microwave, or at room temperature only until they can be removed from container or sufficiently thawed to serve

(NOTE: Thawing in hot water or over-defrosting in the microwave can cause these foods to soften and become mushy.)

D. Thaw meats by placing container under cold running water

E. Cook some foods unthawed when possible

Examples: Frozen corn kernels, ham, roast

F. Thaw baked goods in the microwave, or at room temperature, depending on the type of container

Examples: Cakes, breads

G. Thaw prepared food in the refrigerator or microwave

Example: Main dish casserole

(NOTE: Foods frozen in breakable glass containers will require enough thawing that they can be placed in a preheated oven without breaking.)

XI. Methods used to prepare frozen foods for serving (Assignment Sheet #4)

A. Thaw and serve

(NOTE: This method is especially used in fruits and desserts.)

Examples: Peaches, cookies, cakes

B. Cook and serve

(NOTE: Vegetables will normally not be thawed before cooking in order to prevent loss of vitamin content and spoilage. Exceptions to this rule include corn on the cob and leafy vegetables. Corn would be either overcooked or icy in the center. Frozen leafy vegetables would not cook evenly. Vegetables that have been blanched should still be cooked for a short amount of time in a small amount of boiling water. This method may also be used in cooking meats and casseroles frozen in nonbreakable containers.)

C. Thaw, cook, and serve

(NOTE: Casseroles frozen in breakable containers, corn on the cob, and leafy vegetables must be prepared in this manner.)

D. Serve

(NOTE: Ice creams and other frozen desserts can be served straight from the freezer.)

INFORMATION SHEET

XII. Reasons for drying food

- A. Is inexpensive method of food preservation
- B. Requires little equipment for processing food
- C. Saves on storage space since dried foods take up little space and do not require refrigeration or freezer storage
- D. Provides easy and inexpensive method for packaging and shipping foods

XIII. Drying methods (Assignment Sheets #8 and #9)

- A. Sun drying
- B. Oven drying
- C. Commercial drying

  Examples: Solar heaters, dehydrators

XIV. Factors to consider in packaging and storing dried foods

- A. Cool dried foods before packaging
- B. Pack food into dry, insect-proof containers as tightly as possible without crushing

  Examples: Freezer cartons or bags, glass jars, boxes with fitted lids

- C. Seal containers to insure protection from insects and to prevent exposure to moisture that would permit reabsorption of moisture by foods

  (NOTE: This can be accomplished by sealing joining area of box or jar with a plastic pressure-sensitive tape.)

- D. Package in small amounts

  (NOTE: Dried foods are best if used within a short time after opening.)

- E. Store in cool, dark, dry place

XV. Methods used in preparing dried foods for use

- A. Cover fruits and vegetables with cold water and allow to soak in order to add moisture

  (NOTE: Length of time for food to soak depends on the degree of tenderness desired. Fruits and vegetables can be allowed to soak up to six hours.)

INFORMATION SHEET

B. Cook in water until tender

(NOTE: Additional water may need to be added as water is absorbed into food.)

C. Add flavorings such as salt, pepper, bacon drippings, and salt pork to vegetables as they cook

D. Add sugar to fruit at the end of cooking process if desired

FREEZING AND DRYING
UNIT II

ASSIGNMENT SHEET #1--CLASSIFY FOODS ACCORDING TO CORRECT TYPES OF CONTAINERS AND WRAPPING MATERIALS USED IN HOME FREEZING

NAME____ SCORE_________________

There are many forms of packaging materials available for purchase in the marketplace. The consumer must keep in mind what products are going to be frozen to avoid making an unusable purchase.

Use the information provided and class discussion to classify the packaging material according to the food to be frozen. Place "RC" for rigid container, "FC" for flexible container, and "WM" for wrapping material in the correct blanks.

______ 1. Hamburger

______ 2. Green beans

______ 3. Peaches packed in sugar

______ 4. Catfish

______ 5. Apricots packed in syrup

______ 6. Eggs (after they have been frozen in ice trays)

______ 7. Turkey

______ 8. Corn on the cob

______ 9. Chicken legs

______10. Stew

FREEZING AND DRYING
UNIT II

ASSIGNMENT SHEET #2--COMPARE COSTS OF CONTAINERS AND WRAPPING MATERIAL USED IN HOME FREEZING

NAME____ SCORE____________________

There are many containers and wrapping materials used to store foods for freezing. Because of this wide variety, consumers must decide what items will meet individual freezing needs at the lowest possible price.

Below is a list of containers and wrapping materials used to store foods for freezing. Using available information and local resources (catalogs, department store or grocery store), complete the following assignment. Add additional containers or wrapping materials to the list as they are available.

AVAILABLE FOR PURCHASE	PRICE PER BOX OR PACKAGE	NUMBER OF ITEMS OR YARDS IN PACKAGE	UNIT PRICE
Glass jars			
Plastic freezer jars			
Waxed boxes			
Boil-in-bag pouches			
Plastic bags			
Ziplock bags			
Plastic wrap			
Foil wrap			
Plastic-coated paper wrap			
Paper wrap			
Plastic freezer boxes			

FREEZING AND DRYING
UNIT II

ASSIGNMENT SHEET #3--COMPARE FREEZER STORAGE COSTS

NAME______________________________ SCORE______________

PART I

Use the chart below to compare costs of appliances available for purchase. Freezers are sold according to special features and cubic foot storage capacity.

FREEZER TYPE	**FEATURES (trays, adjustable shelves, door storage)**	**CAPACITY (cubic feet of freezer storage)**	**PRICE OF APPLIANCE**	**COST PER CUBIC FOOT OF FREEZER STORAGE**
Chest				
Upright				
Side-by-side refrigerator/freezer				

ASSIGNMENT SHEET #3

PART II

Freezer storage is available in forms other than home appliances. Commercial freezer lockers are available for rent by consumers and are usually sought by those not having space for a home appliance, not having or not wanting to spend money for a home appliance, or not having enough storage space for frozen food. Commercial freezer lockers assist in handling overflow from home freezers.

Use the chart below to begin comparing freezer storage costs in commercial freezer locker plants in your area.

LOCKER PLANT	CAPACITY	RENTAL TERMS	COST PER MONTH

ASSIGNMENT SHEET #3

PART III

1. Compare monthly costs of paying for a home freezer appliance for the first year and monthly rental of equivalent commercial locker space rented for one year.

   Assume that the home freezer is being financed for 24 months. If possible, include electricity costs of the home freezer and transportation costs involved in using the rented locker space.

   a. Monthly costs for purchased home freezer--

   b. Monthly costs for commercial locker rental--

2. What are the advantages and disadvantages in purchasing a home freezer?

3. What are the advantages and disadvantages in renting commercial freezer storage?

4. If you were needing freezer storage space, would you purchase a home appliance or rent freezer locker space?

   Why?

FREEZING AND DRYING
UNIT II

ASSIGNMENT SHEET #4--CLASSIFY FROZEN FOODS ACCORDING TO CORRECT METHODS USED TO PREPARE THEM FOR SERVING

NAME ______________________ SCORE ____________

Deciding how to prepare frozen foods for serving is an important consideration if nutritive value and product quality are to be retained. Using information provided in this unit as well as from additional sources, classify these frozen foods according to how they should be prepared for serving.

Place the following letters in the appropriate blanks:

"TS" for thaw and serve
"TCS" for thaw, cook, and serve
"CS" for cook and serve
"S" for serve as is

_____ 1. Green beans

_____ 2. Strawberries

_____ 3. Ham

_____ 4. Chocolate refrigerator pie

_____ 5. Chocolate chip cookies

_____ 6. Roast

_____ 7. Mexican casserole frozen in nonbreakable container

_____ 8. Peaches

_____ 9. Corn on the cob

_____10. Carrots

_____11. Tuna casserole in breakable container

_____12. Apple slices

_____13. Asparagus

_____14. German chocolate cake

_____15. Spinach

FREEZING AND DRYING
UNIT II

ASSIGNMENT SHEET #5--COMPARE COSTS OF FROZEN PRODUCTS

NAME______________________________ SCORE______________

Consumers should consider many factors in deciding whether to buy commercially frozen products or to freeze food at home. To determine the true cost of freezing foods it is necessary to consider costs of produce and containers, storage costs, and your time. Assuming that you do not have to purchase freezer storage or freezer containers, complete the chart below to compare the costs of purchasing commercially prepared and home-prepared frozen products. Assume that produce must be purchased. Select and compare prices of two additional products of your choice.

Frozen strawberries	Approximate amount of strawberries and staples needed for 1 1/2 pints 1 quart strawberries	Cost per 1 1/2 pints (48 oz. = 1 1/2 pints) to purchase commercially frozen strawberries Cost:__________	Cost per 1 1/2 pints to freeze with purchased strawberries Cost:__________
Frozen corn (off the cob)	Approximate amount of corn on the cob needed for 1 pint 3-4 ears of corn	Cost per 1 pint (32 oz. = 1 pint) to purchase commercially frozen corn Cost:__________	Cost per 1 pint to freeze with purchased corn Cost:__________
Other ________	__________ __________ __________ __________	Cost:__________	Cost:__________
Other ________	__________ __________ __________ __________	Cost:__________	Cost:__________

ASSIGNMENT SHEET #5

1. Would it be more economical to purchase frozen products or freeze the following produce? Check the appropriate column.

Product	Purchase Commercially Prepared	Freeze with Purchased Produce
Strawberries		
Corn		
Other ______		
Other ______		

2. Considering costs of produce and containers, storage costs, and time used, would you choose to freeze or purchase these products frozen next time?

____

Why? ______________________________

____

____

FREEZING AND DRYING
UNIT II

ASSIGNMENT SHEET #6--FREEZE FRESH FRUIT

NAME________________________________ SCORE______________

Freezing fresh fruit allows you to have fresh fruit flavor and quality "all year round," even when the fruit is not in season. Select a fruit that is in season and study pretreating, packing and freezing procedures for this fruit. Keep in mind as you select fruit carefully that freezing cannot improve the flavor or texture. The following tips may help you prepare fruits for freezing.

* Work with small amounts of produce at a time. This allows for quick handling and prompt freezing.
* Wash small quantities of fruit in cool water.
* Handle fruit gently.
* Never allow fruit to stand in water.
* Drain fruit well. Water soaked fruits make a poor frozen product.
* Prevent light-colored fruits, such as pears, from discoloring by dropping them into a solution of 1 1/2 teaspoons of salt to 1 quart of water or 3 tablespoons of lemon juice to 1 gallon of water before packing.
* Prevent fruit darkening during storage by pretreating.
* Most fruits are better if sweetened before freezing in a dry or syrup pack.

ASSIGNMENT SHEET #6

The following chart will assist you as you complete this assignment. Use it to determine preparation instructions and type of pack for the fruit that you select to freeze.

FRUITS	PREPARATION	TYPE OF PACK
Apples	Peel, core, slice. Put in solution to prevent darkening. Drain and blanch 2 minutes in boiling water or slice directly into chilled syrup.	40% syrup
Apricots	Wash, cut in halves, pit.	40 or 50% syrup
Berries, except Strawberries	Wash, drain well.	30 or 40% syrup, or in dry sugar, or pack without sugar
Cherries, Sour	Wash, drain and pit. Cut in halves.	50 or 60% syrup or dry sugar
Cherries, Sweet	Wash, drain, pit or leave whole.	30 or 40% syrup
Cranberries	Wash, drain.	50 or 60% syrup, or in dry sugar, or pack without sugar
Figs	Wash, remove stems, leave whole, halve or slice.	30 or 40% syrup
Peaches Nectarines	Wash, peel, pit. Cut in sections or slices. Put in solution to prevent darkening.	30 or 40% syrup, or dry sugar with ascorbic acid
Pineapple	Slice then peel. Remove eyes then core. Dice or leave in slices.	40 or 50% syrup
Plums and Prunes	Wash, halve and pit.	40 or 50% syrup or dry sugar
Rhubarb	Wash, trim, cut in 1 inch pieces.	50 or 60% syrup
Strawberries	Wash, hull, slice or leave whole.	40 or 50% syrup or dry sugar
Tomatoes	Wash, core and peel. Cut into pieces or freeze whole.	--Without liquid
Tomatoes, Stewed Cook 5-10 min. With liquid.	Plain or add peppers, celery, onion.	-- Without liquid

Used with permission of Kerr Glass Manufacturing Company.

Use the following space to copy your recipe and preparation instructions for freezing the fruit that you select. Complete the time-work plan that follows and prepare and freeze fresh fruit according to your plan.

ASSIGNMENT SHEET #6

This Recipe is for ______________________________

Ingredients

________________ ________________

________________ ________________

________________ ________________

________________ ________________

________________ ________________

Preparation Instructions: ______________________________

ASSIGNMENT SHEET #6

TIME-WORK PLAN

Name ____________________

Food to be Prepared: ____________________

Kitchen ____________________

Food Supplies Needed:

Utensils Needed:

Order of Work	Time in Minutes
1.	
2.	
3.	
4.	
5.	
6.	
7.	

FREEZING AND DRYING
UNIT II

ASSIGNMENT SHEET #7--FREEZE FRESH VEGETABLES

NAME________________________________ SCORE__________________

Vegetables selected for freezing should be garden fresh. They should also be very tender. If vegetables are over mature, freezing may toughen texture and change flavor. It is recommended that vegetables be frozen within two hours after being picked from the garden. The following tips may help you prepare vegetables for freezing.

- Work with small amounts of produce at a time. This allows for quick handling and prompt freezing.
- Wash vegetables thoroughly in cool water to remove soil.
- Never allow vegetables to stand in water. Water soaked vegetables make a poor frozen product.
- Sort vegetables for size and stage of maturity while washing. Discard any old or inferior vegetables.
- Prepare for freezing by cutting into size and removing peel as desired.
- Blanch all vegetables except green peppers recommended length of time.
- Chill blanched vegetables immediately after completion of blanching time. This stops cooking and helps vegetables hold color.
- Drain cooled vegetables thoroughly and pack into containers.

The following chart will assist you as you complete this assignment. Use it to determine preparation, length of blanching time, and type of pack for a variety of different kinds of vegetables.

VEGETABLES	PREPARATION	BLANCH	TYPE OF PACK
Asparagus	Wash, cut in desired length	2 to 4 min.	Without liquid
Beans, lima	Shell, wash, sort	2 to 3 min.	Without liquid
Beans, green or wax	Wash, cut in 1 1/2 in pieces or leave whole	3 to 4 min.	Without liquid
Broccoli	Wash, trim, split lengthwise, 1 inch thick	3 to 5 min.	Without liquid
Brussels sprouts	Cut off old leaves, leave whole	4 min.	Without liquid
Carrots	Wash, peel; cut in slices or dice	3 min.	Without liquid

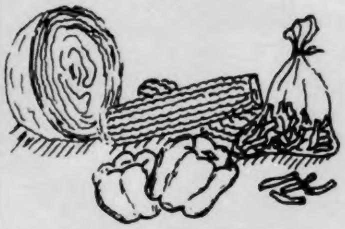
ASSIGNMENT SHEET #7

VEGETABLES	PREPARATION	BLANCH	TYPE OF PACK
Corn, whole grain	Husk, trim; wash; blanch, cut from cob	5 to 7 min.	Without liquid
Greens, all kinds	Should never be steamed; blanch in water	2 to 3 min.	Without liquid
Peas, all kinds	Shell, sort, wash	1 to 2 min.	Without liquid
Peppers, red or green bell	Wash; remove stem and seed; chop or cut in halves or strips	--	Without liquid.

Used with permission of Kerr Glass Manufacturing Company.

Use the following space to copy your recipe and preparation instructions for freezing the vegetable that you select. Complete the time-work plan that follows and prepare and freeze fresh vegetables according to your plan.

This Recipe is for ____________________



Ingredients

Preparation Instructions: ____________________

ASSIGNMENT SHEET #7

TIME-WORK PLAN
Name________________

Food to be Prepared:________________
Kitchen________________

Food Supplies Needed:

Utensils Needed:

	Order of Work	Time in Minutes
1.		
2.		
3.		
4.		
5.		
6.		
7.		

FREEZING AND DRYING
UNIT II

ASSIGNMENT SHEET #8--DRY FRUIT

NAME ______________________________ SCORE ______________

Drying is an inexpensive form of food preservation. It requires little equipment for processing and even saves on storage space. Dried fruits are often called fruit rolls or taffies. They can be eaten as is, made into a beverage, used in a pie filling, in cooking, or as a dessert topping. Select a recipe for drying fruit. Fruit such as bananas, apricots, apples, grapes, berries, pineapple, pears, peaches, or even oranges make good dried fruit. Use the following space to copy your recipe and preparation instructions. Complete the time-work plan on the back of this assignment sheet and prepare the recipe according to instructions.

This Recipe is for ______________________________

Ingredients

______________ ______________

______________ ______________

______________ ______________

______________ ______________

______________ ______________

Preparation Instructions: ______________________________

____

____

____

____

____

____

____

ASSIGNMENT SHEET #8

TIME-WORK PLAN

Name ____________________

Food to be Prepared: ____________________

Kitchen ____________________

Food Supplies Needed:

Utensils Needed:

Order of Work	Time in Minutes
1.	
2.	
3.	
4.	
5.	
6.	
7.	

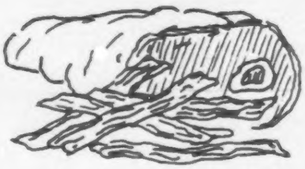
FREEZING AND DRYING
UNIT II

ASSIGNMENT SHEET #9--DRY MEAT

NAME____________________ SCORE__________

Most kinds of meat can be dried. Perhaps the most common dried meat is beef jerky. Dried meat can be eaten as is, used in sauces and gravies or even used to flavor other foods. Select a recipe for drying meat. Use the following space to copy your recipe and preparation instructions. Complete the time-work plan on the back of this assignment sheet and prepare the recipe according to instructions.

This Recipe is for ____________________



Ingredients

Preparation Instructions: ____________________

94-D

ASSIGNMENT SHEET #9

TIME-WORK PLAN

Name ____________________

Food to be Prepared: ____________________

Kitchen ____________________

Food Supplies Needed:

Utensils Needed:

	Order of Work	Time in Minutes
1.		
2.		
3.		
4.		
5.		
6.		
7.		

FREEZING AND DRYING
UNIT II

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

(NOTE: Some foods may be frozen in more than one type of container.)

1. WM
2. FC
3. RC
4. FC
5. RC
6. FC
7. FC
8. FC
9. WM
10. RC

Assignment Sheet #2

Evaluated to the satisfaction of the instructor--Answers will vary

Assignment Sheet #3

Evaluated to the satisfaction of the instructor--Answers will vary

Assignment Sheet #4

1. CS
2. TS
3. CS
4. S
5. TS
6. CS
7. CS
8. TS
9. TCS
10. CS
11. TCS
12. TS
13. CS
14. TS
15. TCS

Assignment Sheet #5

Evaluated to the satisfaction of the instructor--Answers will vary

FREEZING AND DRYING
UNIT II

JOB SHEET #1--WRAP MEAT TO BE FROZEN

(NOTE: This wrapping method could be used in wrapping foods other than meats.)

I. Supplies and equipment

   A. Plastic-coated freezer wrap

   B. Meat

   C. Freezer tape

   D. Scissors

   E. Wax pen or pencil

II. Procedures for wrapping meat by the butcher wrap method

   A. Cut enough paper to cover width of meat plus 4-6 inches

   B. Place food on diagonal close to corner of wrapping paper (Figure 1)

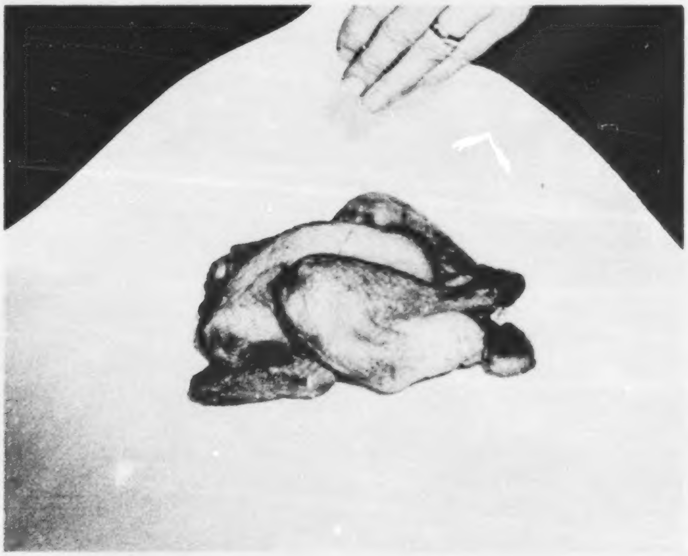


FIGURE 1

JOB SHEET #1

C. Fold corner of paper over food (Figure 2)

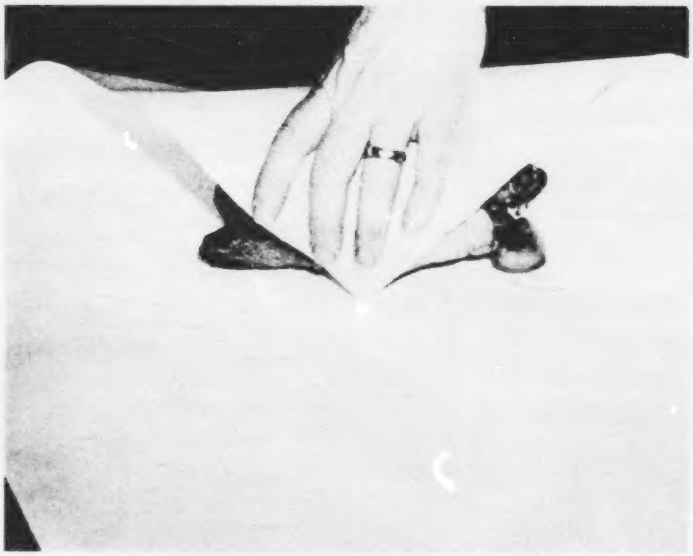
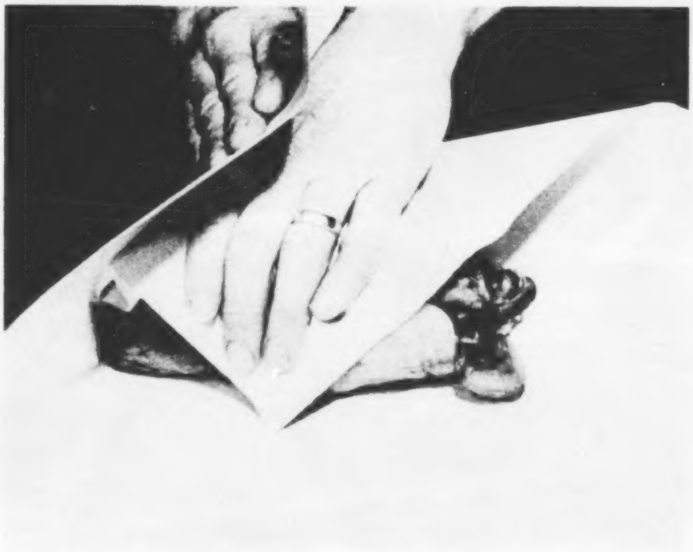


FIGURE 2

D. Bring opposite sides of paper across one another to middle of package (Figure 3)



JOB SHEET #1

E. Continue rolling food to opposite side of paper (Figure 4)

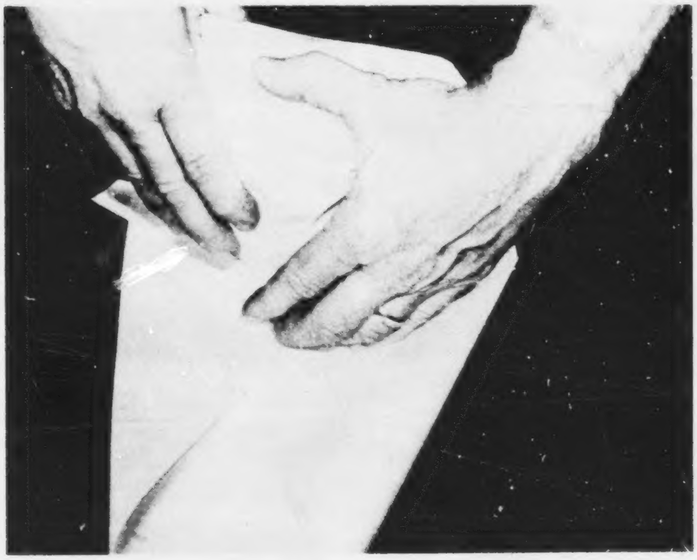


FIGURE 4

F. Fasten loose end securely with freezer tape

G. Label package with name of meat and the date

H. Place meat in freezer

I. Return supplies to storage

FREEZING AND DRYING
UNIT II

TEST

NAME________________________________ SCORE______________

1. Match terms associated with freezing and drying to the correct definitions. Place the correct numbers in the blanks provided.

______a. Boiling fruits in sugar-water solution

______b. Removal of liquid from food by natural or artificial means

______c. Process of removing moisture from food so that microorganisms will not grow

______d. Characteristics necessary for freezer containers and wrapping materials in order to keep moisture and flavor in while keeping air and odors out

______e. Process in which vegetables or fruits are placed in colander or other container and placed in a kettle with small amount of boiling water

______f. Empty space left at top of the jar or container in which food is packed

______g. Drying out of foods caused by exposure to very dry, cold air

______h. Boiling food in water for a few minutes and then dipping in cold water to prevent spoilage

______i. Measurement describing the volume of a cube one foot high, one foot wide, and one foot deep

______j. Method of preserving food at a temperature of 0°F or below

______k. Moisture-proof or vapor-proof container or wrapping material used for freezing food

______l. Pretreating fruits with flowers of sulfur or sublimed sulfur before drying

1. Freezing
2. Drying
3. Blanching
4. Syrup blanching
5. Moisture-proof/vapor-proof
6. Freezer burn
7. Head space
8. Dehydration
9. Cubic foot
10. Steam blanching
11. Sulfuring
12. Proper packaging

2. Discuss reasons for freezing food.

____

____

____

____

____

____

3. State two advantages of freezing.

a. ______________________________

b. ______________________________

4. Select from the following list factors to consider when selecting foods to be frozen or dried. Mark each correct answer with an "X."

_____a. Select high quality, fresh products

_____b. Select green fruits and vegetables

_____c. Select meats and poultry that have been chilled quickly after killing

_____d. Select prepared foods for freezing, baked or unbaked, that will retain shape and texture

_____e. Select ripe fruits and vegetables that have been vine- or tree-ripened when possible

5. State reasons proper packaging is important in freezing.

a. ______________________________

b. ______________________________

c. ______________________________

6. State three factors to consider in purchasing containers or wrapping materials used in home freezing.

a. ______________________________

b. ______________________________

c. ______________________________

7. Complete the following chart on types of containers and wrapping materials used in home freezing by filling in the spaces provided.

Type of Containers or Wrapping Materials	Examples	Recommended Uses	Some Foods Which Can be Stored
Rigid Containers	Glass canning jars Freezer jars Plastic freezer boxes Waxed boxes	Used in packaging most foods but are recommended for all foods that are soft or fluid at room temperature	a.__________
b.__________	Plastic bags	Used in packing meat and other products with irregular shapes as well as vegetables and fruits packaged without syrup or added sugar	Birds, fish, grapes, raspberries, blueberries, eggs that have been frozen in and removed from ice trays
Wrapping materials	Plastic wrap Foil wrap Plastic-coated paper wrap	c.__________	Chicken pieces, hamburger, fish pieces, porkchops

8. Select from the following list rules for storing food in the freezer. Mark each correct answer with an "X."

______a. Replace foods used from the freezer with others for economical use of freezer space

______b. Store foods indefinitely in the freezer

______c. Keep a record of frozen foods that are in storage; update as foods are put put in or taken out

______d. Place most recently frozen foods on the top or front of freezer

______e. Store like foods together

______f. Label and date all foods to be stored in freezer

9. Discuss factors to consider in the selection of a freezer.

10. Select from the list below correct methods of thawing frozen foods. Mark each correct answer with an "X."

______a. Use defrost cycle of microwave oven

______b. Thaw meats by placing container in a pan of boiling water until completely thawed

______c. Thaw prepared foods in the refrigerator or microwave

______d. Place fruits in boiling water until completely thawed for serving

______e. Defrost frozen foods in refrigerator if time allows

______f. Thaw all foods before cooking

______g. Thaw baked goods under running water

11. State methods used to prepare frozen food for serving.

a. ____

b. ____

c. ____

d. ____

12. Discuss two reasons for drying food.

____

____

13. State two methods for drying foods.

a. ____

b. ____

14. Select from the following list factors to consider in packaging and storing dried foods. Mark each correct answer with an "X."

______a. Package in small amounts

______b. Store in cool, dark, dry place

______c. Cool dried foods before packaging

______d. Pack food as loosely as possible

______e. Containers should not be sealed so that contents will be allowed to reabsorb moisture

15. Describe two methods used in preparing dried foods for use.

a. ____________________

____

b. ____________________

____

16. Classify foods according to correct types of containers and wrapping materials used in home freezing.

17. Compare costs of containers and wrapping materials used in home freezing.

18. Compare freezer storage costs.

19. Classify frozen foods according to the correct methods used to prepare them for serving.

20. Complete a chart comparing costs of frozen products.

21. Freeze fresh fruit.

22. Freeze fresh vegetables.

23. Dry fruit.

24. Dry meat.

25. Demonstrate the ability to wrap meat to be frozen.

(NOTE: If activities 16-25 have not been finished before the test, ask your instructor when they should be completed.)

FREEZING AND DRYING
UNIT II

ANSWERS TO TEST

(NOTE: It may be helpful to use your blank test to make a test key. The point system designated in parentheses is intended to be a guideline and should be adapted to meet the needs of each teaching-learning process. The point total is 250.)

1. (24 points)

    a. 4
    b. 8
    c. 2
    d. 5
    e. 10
    f. 7
    g. 6
    h. 3
    i. 9
    j. 1
    k. 12
    l. 11

2. (5 points)

    Discussion should include:

    a. To prevent produce from spoiling
    b. To gain self-satisfaction
    c. To retain fresh food color, flavor, and nutrients that would be lost through use of other methods of food preservation
    d. To have access to foods that are out of season
    e. To save time in meal preparation
    f. To carry on traditions
    g. To take advantage of freezer storage space

3. (2 points)

    Any two of the following:

    a. Retains fresh food color, flavor, and nutritional value better than other methods of food preservation
    b. Is easy to complete freezing procedures
    c. Is less time-consuming than other food preservation methods
    d. No special equipment is needed to process foods

4. (10 points)

   a, c, d, e

5. (3 points)

   a. To prevent chemical changes of food caused by exposure to air

   b. To prevent physical changes caused by loss of moisture

   c. To prevent formation of ice crystals

6. (3 points)

   Any three of the following:

   a. Food to be frozen

   b. Durability of container or wrapping material

   c. Space available for storing frozen food

   d. Cost of containers and wrapping materials

   e. Reusability of packaging materials

   f. Design of containers and wrapping materials

7. (6 points)

   a. Fruits packed in syrup or sugar, butter, stews, creamed foods, meats with gravy

   b. Flexible containers

   c. Used in packaging meat that is freshly processed or to repackage purchased meat

8. (12 points)

   a, c, e, f

9. (5 points)

   Discussion should include:

   a. Amount of space available

   b. Storage capacity

   c. Usefulness of special features

   d. Cost of purchasing

  e. Cost of operating
  f. Guarantee and warranty
  g. Service available
  h. Care required

10. (14 points)

    a, c, e

11. (4 points)
    a. Thaw and serve
    b. Cook and serve
    c. Thaw, cook, and serve
    d. Serve

12. (5 points)

    Discussion should include:
    a. Is inexpensive method of food preservation
    b. Requires little equipment for processing food
    c. Saves on storage space since dried foods take up little space and do not require refrigerator or freezer storage
    d. Provides easy and inexpensive method for packaging and shipping foods

13. (2 points)

    Any two of the following:
    a. Sun drying
    b. Oven drying
    c. Commercial drying

14. (10 points)

    a, b, c

15. (5 points)

    Description should include any two of the following:
    a. Cover fruits and vegetables with cold water and allow to soak in order to add moisture

   b. Cook in water until tender

   c. Add flavorings such as salt, pepper, bacon drippings, and salt pork to vegetables as they cook

   d. Add sugar to fruit at the end of cooking process if desired

16. Evaluated to the satisfaction of the instructor (10 points)

17. Evaluated to the satisfaction of the instructor (10 points)

18. Evaluated to the satisfaction of the instructor (15 points)

19. Evaluated to the satisfaction of the instructor (15 points)

20. Evaluated to the satisfaction of the instructor (15 points)

21. Evaluated to the satisfaction of the instructor (15 points)

22. Evaluated to the satisfaction of the instructor (15 points)

23. Evaluated to the satisfaction of the instructor (15 points)

24. Evaluated to the satisfaction of the instructor (15 points)

25. Performance skills evaluated to the satisfaction of the instructor (15 points)